

Children's Newspaper

The Man Who Lived Before His Time  
See My Magazine for June

# The CHILDREN'S NEWSPAPER

AND CHILDREN'S PICTORIAL

The Story of the World Today for the Men and Women of Tomorrow

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EDITED BY ARTHUR MEE

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## THE CONTINENT UNDER ONE FLAG

### DAILY WONDER OF THE HEAVENS

#### LORD RAYLEIGH'S DISCOVERY

The Invisible Benefactor that Enables Us to See

#### AND MAKES THE SKY BLUE

Light is a compound of many colours, of which some shades are injurious. Yet, day by day, the boundless streams of light are pouring from the sun, warming and illuminating our earth, and making all life possible. The harmful rays come down upon us from the heavens and harm us not.

Science seizes and controls light, shuts out this ray and that, and concentrates others upon our bodies, to cure disease, to promote the growth of healthy tissue, to calm and strengthen nerves which ill-health has made unbearable. Yet the unchecked light, made up of good and harmful rays, drowns us daily in its splendour, and we all thrive on it. How is the mystery explained?

#### What Makes the Blue Light

Lord Rayleigh, destined to add new honours to a name made illustrious by his father, seems to have solved the secret. Why is the sky blue? The answer to that will help us.

The blue of the sky is due, in the main, to particles floating in the air. These particles scatter and break up the blue rays in light, with the result that, while the sky becomes azure, the sun looks yellow. What are those particles?

We all used to think they were atoms of dust—from chimneys, from volcanoes, from deserts—and it is true that such dust is in the air, highly important in catching light so as to add loveliness to sunsets, and in acting as centres for the collection of atmospheric moisture, from which the earth receives the rain.

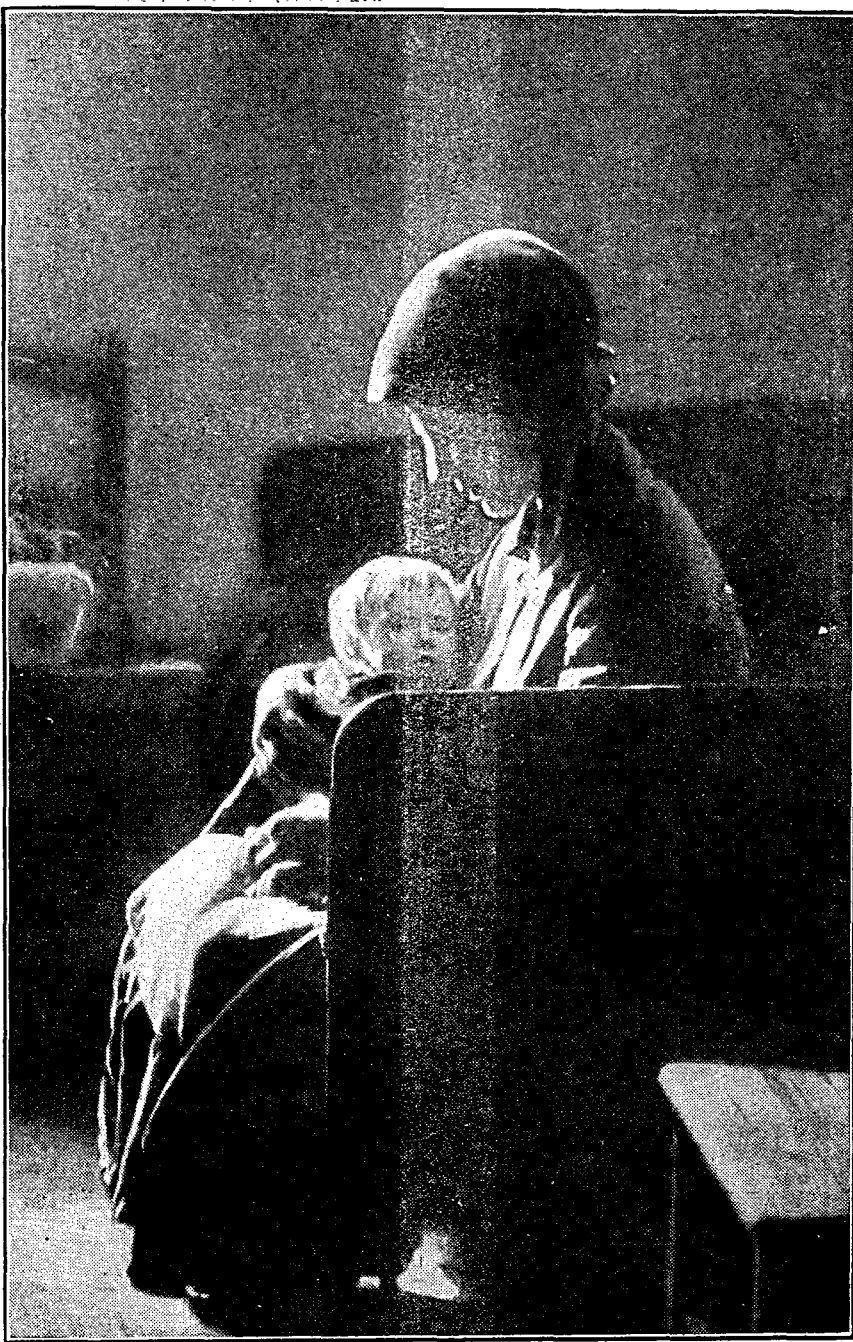
But the particles which deal with the blue rays prove, Lord Rayleigh finds, to consist almost entirely of the gasses which constitute the air itself. He has found the blue light due to these gas-particles in the dustless air of caves.

#### Four Miles Up

Now, ozone, a modification of oxygen, intercepts the dangerous ultra-violet rays, and so Lord Rayleigh investigated in the expectation of finding large bodies of ozone at work in the air, low down near the earth. The ozone is not there! It is not present in any volume in the first four miles of air. How, then, can ozone safeguard us from the deadly rays?

He has reached the conclusion that the ozone exists in great quantities in the highest limits of our air. Nature is the greatest of scientists. It renders light harmless as it enters our atmosphere. We cannot see ozone; but this invisible ozone makes all things visible for us. Without its aid the ultra-violet rays in light would prevent us all from seeing!

### Twilight in the Fallen Capital



A mother in the Austrian capital with her little child, fed by the C.N. Fund

### SURPRISING DINNER PARTY

#### NICE FOOD AND NASTY

Does Your Dinner Do You More Good if You Like It?

By a Scientific Expert

Everybody likes food well cooked and attractive. We know the sight of pleasant food attracts an appetite; and there is an idea that the more you like your food the more good it does you.

But it is just as well not to be too particular, and some very interesting tests have been made in America, where scientific men at the universities have become famous for their long-continued experiments on the value of foods in building up the human body and sustaining its power of work.

These tests have shown that, as long as food contains the substances for body-building, it does not much matter whether those who eat it like it or not.

A number of students and professors of the Jefferson Medical College, in Philadelphia, were first fed for seven days on agreeable and nourishing diet.

#### What the Body Uses

Everybody was given the same; all the meals were served in pleasant surroundings; and all went on with the work given to them. Meanwhile the most careful scientific measurements were made of the way in which their bodies profited by what they ate; how much of it was used up in body-building, and in supplying the energy for muscular exercise and brain work. It was found that the body used up, or made use of, nearly 87 per cent. by weight, or, let us say, nearly nine-tenths, of the food eaten.

Then the system was changed. Instead of serving the students and professors with pleasant meals, all the substances of the meals were first stirred up together in a big dish—meat, biscuits, jelly, custard, pudding, and so on, all in one mess—so that nobody could tell what he was eating. Then this mess was served up in dirty dishes, smeared with charcoal, on a dirty table, and with water in dirty glasses.

#### A Strange Meal

To put a final touch of discomfort to the meals, jars of evil-smelling stuff were put on, or under, the tables. All this was so repulsive that it made one or two of the students sick at first; but they got over that, and these experiments were continued for days, all the measurements being taken with great care as before.

To everybody's surprise, it was found at the end that they had done just as well bodily as before, and that their bodies had used up the food materials to the extent of 86 per cent., or with only one-hundredth difference. So it seems, contrary to what might have been expected, as if the stomach can be insulted at will, so long as the food can be digested.

### THE TROUBLED LAND OF MEXICO

For years the government of Mexico has been deplorably unsatisfactory. Revolution has followed revolution, and the business of the country has been gravely disturbed. The revolutions have not been risings of the people so much as attempts by rival generals to seize the power of Government.

Mexico abounds with so-called generals, each gathering a band of cut-throat followers of the same type as the brigands of Southern Europe in earlier times. Indeed, it has not been uncommon for Mexican generals to hold any man for ransom if they thought his friends or Government would pay for his safety.

The latest revolution, in which General Obregon has deposed President Carranza, seems to promise better than some that

have gone before it. The new revolutionists have not injured the stranger within their gates, or destroyed property, or indulged in brutal massacres. They announced to the defeated president that he may leave Mexico in safety, and there seems to be a better prospect of the safety and orderliness which are needed if the great wealth of the country is to be taken out of its soil and distributed over the earth to supply the needs of men.

Mexico was the first great land of the American continent to be developed by Europeans, and it is much to be hoped that this troubled land will soon settle down to enjoy the natural prosperity that belongs to it. Spain ruled the country for three centuries.



## NEWS FROM THE PAST

## Desert Discoveries

## HISTORY BURIED IN THE SANDS OF EGYPT

Professor Flinders Petrie, whose discoveries in Egypt have done so much towards clearing up the dark past of that ancient land, is resuming his digging in Egyptian tombs, temples, and pyramids. His excavators have now returned to the low-lying part of the Fayum Desert, westward of the Nile, where, around the Lahun Pyramid, they have completed their search for relics of the Twelfth Dynasty. Here are some of their finds.

1. A gold serpent from the royal crown of King Senusert II., found among rubbish in the pyramid.

2. Stone coffins of kings and queens, showing that in the time of the Egyptian Middle Kingdom, under the Senuserts, the accuracy of Egyptian work was so exact that the straightness of the side of the king's sarcophagus was true to the seven-thousandth of an inch, and artistic perception was perfected long before the rise of art in Greece.

3. The tomb of Anupy, the builder of the pyramid at Lahun. Anupy is described as at that time the chief architect of Egypt, and a mausoleum in his honour resembled the tombs of kings.

4. The stone coffin of a king hitherto unknown was discovered—a pretender in the time of the Nineteenth Dynasty. He was a son of the great Rameses.

The discoveries of last winter's digging prove once more that excavators in the desert dust of sixty centuries never know, from hour to hour, what message they may receive from the far-off past in the form of relics.

## BOYS OF ST. BARNABAS

## Schoolboy at the Organ

## PIT BOY AND PARISH CLERK

Our recent photograph of Ernest Brown, the 14-year-old pit lad who has been appointed parish clerk of St. Barnabas, Pleasley Hill, near Mansfield, should have as companion picture that of Noel Gash, son of the village policeman, who, at the same age as Ernest, is organist of the church.

When the vicar and many of the church officers were away on war service, it was Ernest Brown who stepped quietly in and filled many gaps which other people seemed to have forgotten, for he opened the church doors for service, rang the bell, made all arrangements for the visiting clergy, acted as sacristan, and was, in fact, a parish clerk, so that when the war was over that office was actually offered to him and accepted.

This is how Noel Gash, the constable's son, came to be appointed organist at the same church. Just before the vicar went into the army, he wanted someone to play the organ at a children's service, and the boys and girls pushed Noel forward. The vicar persuaded him to take his seat at the organ, and not to bother about the stops, but to "play just as you would at home."

The boy acquitted himself well, and, struck by his evident ability as a musician, the vicar persuaded the parents to place their son under the instruction of a professional organist.

Noel made such remarkable progress that the vicar offered him the position of church organist, which he has now held for over a year. *Photograph on page 12*

## DOG THAT WOULD NOT BE TRICKED

An Isleworth reader has a terrier which always runs to fetch letters when she hears the postman bang the gate and rat-tat the knocker, but will not move if her master does the same in imitation of the postman.

## QUEER SCENE IN A HEN RUN

## Was the Rat a Friend?

From Cambridge we have this suggestion of a friendly feeling between rats and poultry.

I have some chickens which I have kept apart from the others, with their mother, in a small, covered-in coop in the garden.

We had noticed burrows and a trail, and had set a trap, which proved to be ineffective.

The other night my father went to put a sack over the front of the coop, and by his bicycle lamp he saw a rat run from under the hen, and stand with his head and front feet up in the corner.

The chickens were not sleeping under the hen, but none of them seemed in the least disturbed by the rat, and evidence strongly pointed to the rat having been a friendly visitor to the coop for many weeks.

## FAITHFUL SENTINEL

## Dog that Waited Through the Night

A Hampshire reader sends us an account of a dog's devotion to duty.

When told to "guard" anything by her little mistress Fanny will never leave her post. Before Christmas Fanny was accompanying a shooting party, and was sent by her mistress into the bushes to find a disabled bird. She did not return, and her mistress went home, expecting her to follow.

Night came, but still Fanny had not returned, and it was feared she might have got into a trap.

Early next morning her mistress set out in pouring rain to try to find her. It had rained all night. Under the same bushes where she had been told to look for the bird she was, safe and sound, but soaked to the skin, with the pheasant lying in front of her.

## TAMING A KESTREL

## A Shetland Reader's Feat

A letter from the Shetland Islands tells of the taming of a kestrel. The writer says:

I caught and tamed a young kestrel. When young its head resembled that of an eagle, only very much smaller. I fed it on beef, small birds, and rabbits, rarely fish, and when full grown it was a very handsome bird.

It would perch on my shoulder, and I could go for a long walk with it. When it screamed, as it sometimes did, no small birds were to be seen.

As long as I had it it kept the destructive little birds from our berry trees, but owing to the scarcity of game in winter it was almost impossible to feed it, so I put it in the Isle of Noss, where there are many rabbits. It did not stay there long, but flew away.

## THE HOME-COMING

## A Tale of Three Pigeons

One of our readers who thinks it is wonderful how birds know each other, says:

We had a young pigeon that was fed so fat by the old birds that it could only just toddle about. The two birds were very proud of it, and would go short of food themselves to feed it.

So we sold it to a man who lived about a mile away. About a week later we found, one night, that the cock bird was missing; but he returned the next day, bringing the young one with him.

## THE TURKEY AND HIS FRIEND

A Norfolk reader whose uncle has poultry, including bantams and a turkey, says:

Molly, the turkey, is very fond of one of the bantams. The friendship began when Molly was shut up, and the bantam used to go in every day and stay with her. Now that both are running in the field the friendship continues. They lie in the same nest, and if any of the fowls peck the turkey's little friend she will fly at them, and then return to the bantam's side, as much as to say, "I will guard you from all dangers."

## EBB AND FLOW OF LIFE

## Billions of White Rabbits

## HOW THEY EAT UP EVERYTHING AND COME TO WANT

Prosperous times for animals mean big families. Given fine weather, plenty of food, and few enemies, the favoured race multiplies exceedingly. The river of life overflows and there come vole plagues, lemming marches, and locust swarms.

The well-known American naturalist Mr. Thompson Seton tells us in his "Arctic Prairies," a very interesting book of which a new edition has just been published, that the white rabbits, or "snow-shoes," of the Mackenzie River valley in Canada reached billions in the winter of 1903-4.

The Mackenzie River valley must have been fairly full! What happens to all these creatures? These overpopulating animals devour the available food supply and begin to be in want; they poison the ground; they attract enemies, who reduce their ranks.

## Lynx Follows the Rabbit

In the particular case of the "snow-shoes," when they multiply in millions the Canadian lynx has the time of its life. The result is that the flood of life begins to abate, but sometimes before it subsides naturally it is assuaged by epidemics. Diseases crop up and run riot, and in a few weeks the countless hosts are wiped out. In 1907 Mr. Thompson Seton and his comrades saw

## A Wanderer Who Came Upon a Battle

Six hundred years ago a wandering Turk named Ertogrul came by chance upon a battle, and with 400 followers turned the tide of victory.

His power increased from that day, and out of it grew the Turkish Empire.

Today, after 600 years, the empire is broken in pieces. It has wasted to a province and a capital.

Think what this empire was:

Turkish Empire in 1600 2,500,000 sq. ms.  
British Empire in 1600 91,000 sq. miles

Compare these two empires now:

Turkish Empire in 1920 195,000 sq. miles  
British Empire in 1920 15,000,000 sq. ms.

Compare their populations then:

Turkish Empire in 1600 16,000,000  
British Empire in 1600 4,500,000

Now the Turkish population is a few millions, the British Empire 400 millions.

The old Turkish Empire included seven of the present capitals of Europe—Constantinople, Buda-Pesth, Athens, Belgrade, Sofia, Bucharest, Cetinje.

It embraced, also, nearly all the most glorious cities of biblical and classical times, among them being:

Carthage	Constantinople	Belgrade
Tyre	Cairo	Mecca
Babylon	Adrianople	Medinah
Nineveh	Alexandria	Bagdad
Philippi	Palmyra	Smyrna
Athens	Memphis	Basrah
Damascus	Jerusalem	Thebes

Such was the dazzling empire that has vanished; a proof that they who take the sword shall perish with the sword.

not a single "snow-shoe" where millions were swarming three years before. This illustrates the ebb and flow of life.

"A lynx is nothing but an animated rabbit, anyway."

Someone familiar with the North of Canada made this quaint remark, and there is a grim truth in it. The lynx is a re-incarnation of many rabbits; a new embodiment of the energy that was in many rabbits. When rabbits are plentiful, lynxes likewise flourish; but when rabbits are wiped out, lynxes must trek or die. "Of all the northern creatures none is more dependent on the rabbit. It lives on rabbits, follows the rabbits, tastes like rabbits, increases with them, and on their failure dies of starvation in the unrabbited woods." Such is the ebb and flow of life!

## FIRE PERIL AT THE PICTURES

## SMOKERS FIRST OR SAFETY FIRST?

## Growing Danger in Kinemas and Theatres

## LADY'S HAT ON FIRE

Those of us who go to theatres and picture palaces in these days must be careful.

It used to be the pride of the London County Council that our public buildings were the safest buildings anywhere, but that proud claim can hardly be now maintained. The practice of smoking in theatres and kinemas has made these places more dangerous than before.

It is only a month or two since we called attention to the fact that dozens of matches were struck in St. James's Theatre in one night by people who had evidently forgotten the names of the actors, and no attempt was made to stop this reckless habit in a crowded building.

## Where is the L.C.C.?

Now, in a much more crowded place, an incident is reported such as must fill many people with apprehension. At the Stoll Picture House, perhaps the finest place of amusement in all England, a lady's hat was found to be burning the other afternoon, having been set on fire by the end of a cigarette thrown down by some criminal behind.

In this case the offender had not even the sense of honour to express his sorrow for having ruined a lady's hat, but that is perhaps hardly to be expected from such people as will recklessly imperil a great building and audience for the sake of a few puffs of smoke.

What is truly amazing is the calmness of the London County Council in the presence of this growing danger, and the willingness of our theatre managers that these risks should be run. If the authorities will not combine to run our kinemas and theatres on the principle of Safety First, all that will be left for the general public will be to confine their visits to places which are reasonably safeguarded from this terrible peril of fire.

## A NATION CUTTING DOWN EXPENSES

## How Hungary is Doing It

All the European countries engaged in the war had to increase their staff of State officials, and now, like Great Britain, have to face the task of dismissing those who are no longer needed.

This is how Hungary is dealing with the difficulty. First, it was proposed that all should be dismissed who were younger than 35 or older than 50, or who had been engaged during the last 10 years; but on consideration that plan was rejected.

Then the plan was adopted of dismissing from the service of the State:

1. All followers of doctrines dangerous to the nation.
2. All who have property that provides a living.
3. All who have a pension on which they can live.
4. All who have only been engaged in State service a short time.
5. Married women, unless they support the family.
6. All girls who are not orphans or supporters of a family.
7. All who have learned to do some work that they can now resume.

It is interesting to compare these plans with those adopted in our own country. It will be seen that the Hungarians act much more boldly than we do, and shield women less.



## WAR STILL RUMBLING TROUBLED LINE BETWEEN EAST AND WEST

### What is Poland Doing?

### TURKS AND THE PEACE

By Our Political Correspondent

After a great thunderstorm the peals continue to mutter in the distance, and atmospheric quietness only comes gradually, with scattered outbursts here and there. So it is with the great upheaval of the European war. Though the supreme want of the world is peace and a return of plenty, peace does not yet reign in Eastern Europe. War's reverberations still echo over Russia.

Along the Russo-Polish frontier both States remained armed, and no one could say finally where the frontier line of a settled peace would be drawn. Between part of Bolshevik Russia and the new Republic of Poland lies the new territory of Ukraina, and what the real wishes of the Ukrainians are no one in Western Europe can say with certainty. Are they with or against the Russia led by Lenin and Trotsky?

### Capital City Captured

The truth is that people in Great Britain and France who wish to be honestly informed about the genuine desires and aims of Russia, Ukraina, and Poland have no means of knowing the plain facts, and are bound to wait and see.

Quite suddenly the Polish army advanced into Ukraina, claiming that its object is to deliver Ukraina from Russia. The Ukrainians have joined in the movement. Kieff, the capital of Ukraina, was captured, and the Russian Bolshevik armies were driven over the river Dnieper.

The British explanation of their advance, which was entirely unexpected in this country, is that they knew the Russians were preparing to attack them, and that the Ukrainians were eager to be released from Bolshevik bondage, and so they defended themselves, and helped their friends by striking first.

### Advance of the Poles

However that may be, the advance by the Poles has been successful. The Russian Government at Moscow has been shaken by fear, and doubt as to what will follow reigns over Eastern Europe. Poland apparently wishes to see Ukraina firmly established as a neutral State between herself and Russia, a State freely open to trade for the corn which Ukraina produces plentifully, and which Poland and Russia need.

If a strong blow be struck unitedly at the Bolshevik Government in Moscow by both Poland and Ukraina, then that Government is face to face with the greatest danger it has yet encountered, especially as it seems to be quarrelling with the Russian Cooperative Societies, which are the only Russian institutions that have retained the confidence of countries outside Russia.

### Distracted Russia

With quarrels within and fighting without, distracted Russia is no nearer to peace, or to the clear expression of her people's true desires.

In the meantime doubt hovers also over the remnant of the Turkish Empire. The Allies have stated their Peace terms to Turkey, and the Turkish Government will sign the agreement; but, even as it signs, the Turkish army, assembled in the mountains of Anatolia in Asia Minor, the true home of the Turkish race, under their general, Mustapha Kemal Pasha, disowns the signing, and holds itself in reserve to resist any part of the terms with which it disagrees.

And so the war's fitful murmurings linger along the vaguely marked line that divides the eastern and the western worlds.

J. D.

## C.N. LETTERS TO ZULULAND

### An Empire School Link

We published not long ago a letter from Mr. Wade, the headmaster of the Government School at Gingindhlova, in Zululand, asking that some of our readers would write to some of his children, telling them about their life in England, as it is not easy for children born in South Africa, and always living there, to imagine the life of the British people and how it differs from their own.

Now Mr. Wade writes to us saying that he has received hundreds of letters in response to our appeal. Will all our correspondents please accept this general acknowledgment of thanks? An endeavour is being made to interest other schools in Zululand, so that all letters shall have a personal reply in due course.

We thank our readers for sending so many letters to the children of Zululand, and so linking up the Empire by friendly feeling. Why not a League of Schools to help on the League of Nations?

## DONKEY'S INTELLIGENCE

### Jenny and the Lamp

An Isle of Wight reader sends us this instance of a donkey's intelligence.

As we returned home late on a cold winter night we heard the donkey calling to us from the field. We thought this unusual, as at that time she was generally warm in her stable.

When we entered the house and lighted the lamp she called again.

In ten minutes or so, as one of us went upstairs and then lighted a taper which could be seen through an upper window, Jenny spoke once more.

Now we felt sure something was wrong, and went out to her. Then we found she could not get into the stable out of the cold, for the door had blown to.

Evidently she was asking for help each time she saw signs of our nearness.

## C.N. CHILDREN'S FUND

### Tyne School at the Top

Our thanks, and the thanks of a thousand ill-fed children, are due to Miss Edith Sheppard, the head-mistress of St. Margaret's School at Gosforth, Newcastle-on-Tyne, and to her clever pupils for the most splendid contribution yet made to our Fund for Starving Children in Central Europe.

The school has given two public performances of Beauty and the Beast, and the success of the performance may be judged by the fact that Miss Sheppard sends us a cheque for £46 15s. 2d. She also includes a further cheque for two guineas from the teachers and scholars of the Wesleyan Day School at Hebburn.

We are sure hundreds of thousands of our readers will, in their hearts, join us in congratulating Miss Sheppard and her school on their magnificent success.

The C.N. Fund is now 117,000 shillings, sufficient to provide food for 63,000 children for one week. All subscriptions are acknowledged directly by post from the Save the Children Fund.

### IN THE AUCTION ROOMS

The following prices have lately been paid in the auction rooms for objects of interest.

A pearl necklace . . . . .	£54,500
A painting by Meissonier . . . . .	£5250
Four tapestry panels . . . . .	£1550
A 15th century book . . . . .	£882
Five Jacobean glasses . . . . .	£820
Flag from the battle of Culloden . . . . .	£750
Two mahogany armchairs . . . . .	£294

### Pronunciations in this Paper

Bertillon . . . . .	Ber-tee-yon
Faroe . . . . .	Fay-ro
Hyderabad . . . . .	Hi-der-a-bahd
Jacopo . . . . .	Ya-koh-poh
Spahi . . . . .	Spah-ee
Titian . . . . .	Tish-yan

### GRAND COWSLIPS

A young reader of the C.N. at Honor Oak, London, John Hewes, has picked several cowslips in his garden growing on stalks 15 and 16 inches high.

## PATHWAY OF DEATH Pony Dies from Its Master's Ignorance

### A SWEEP'S TRAGIC MISTAKE

In these days, when science taps for men's use the mighty powers of electricity, it is as necessary for safety that everybody should have some knowledge of science as that they should know that fire burns. The ignorant cannot expect to go about in their ignorance and have someone who knows to take care of them.

A Taunton sweep, who has been in the habit of fastening his pony by a chain attached to its iron bit and then passed round an iron electric light standard, is surprised that, owing to a leakage of electricity, his pony has dropped dead.

Of course it would drop dead if there were a considerable leakage; and nobody can guarantee, in all weathers, that there will not be some leakage of such a swift power as electricity, which leaps along any easy path.

We are sorry for the pony, and for the sweep, but where has he been that he did not know how continuous iron, from a standard, along a chain, to a pony's bit, is a regular highway for electricity?

In years to come the earth is bound to be fuller and fuller of usable electricity, and nobody can afford to be ignorant of the paths it takes—for good if we have knowledge of it, for evil if we ignorantly challenge its powers.

## F.R.S. FOR INDIA

### Honour for a Great Discoverer

### MAN WHO MEASURES THE GROWTH OF PLANT LIFE

A hopeful sign of the times is the acceptance into the most select ranks of scientific men of the Indian experimenter Sir Jagadis C. Bose. He is the first Indian to be made a Fellow of the Royal Society for scientific research.

One of his countrymen had previously been honoured for mathematical distinction, and at present these two represent India on the roll of the society which confers the highest honour on discoverers of new knowledge.

Nearly twenty years ago Sir Jagadis Bose approached the Royal Society with the results of his study of how plants respond to outward sensation, but the scientific men of that day were not ready to accept his assertions. Now they accept them as sound in principle, and admit that this careful and determined Indian experimenter has extended the range of human knowledge.

It is delightful to find our Indian fellow-subjects, who are often regarded as backward, quietly taking their place, by right, in the first line of those who win knowledge by reading aright the operations of Nature in plant-life.

What Sir J. C. Bose has proved is that all plants have a sort of sensation, and respond to touch, and even to electric waves, as we do; and he has been able to measure the growth of plants and show it on a screen.

## THE THREE JUDGES

### One Who Never Saw a Film

Three judges helped to make the papers interesting the other day.

One of them, Mr. Justice Eve, confessed that he had never seen a cinema picture.

Another, at the Old Bailey, in letting off a juryman who could not read, said, "You will be released from serving, but you had better learn to read as soon as you can. You are only 58."

The other judge was in the Yorkshire Court, where the counsel in a case spoke of "adverts." "You mean advertisements, I suppose?" the judge remarked.

We suppose that is what counsel did mean, and it is a pity that a lawyer should be so busy that he must cut his words in two. He charges enough for them.

## THROUGH SLAVERY TO MASTERY

### REMARKABLE PAGE OF BRITISH HISTORY

### When Miners Wore Iron Collars and Were Sold

### TREMENDOUS RISE TO POWER

Coal is up again, and it would seem that at the present time the most powerful class in the community is the whole body of coal miners. They affect our lives daily in a hundred ways, and their wages and the cost of the product of their toil fall heavily upon us all.

We are dependent on them for our supplies of power. If they ceased working manufacture and transport everywhere would be at a standstill. They are able to demand ever-increasing wages and shortened hours, and it is doubtful whether any other class of citizens could so impose its will upon the nation.

Yet it is not very long since British miners were actually legal slaves, and there are people living today whose grandfathers were sold with the mines in which they worked, and from which there was no means of escape.

### Slaves in Modern Britain

We read in *Ivanhoe* of the swineherd who had soldered round his neck a metal ring with the inscription, "Gurth, the son of Beowulph, is the born thrall of Cedric of Rotherwood," and it all seems ancient history. But in the Scottish mines the grandfathers of people still living wore iron collars perpetually round their necks, bearing the names and addresses of their masters. We can hardly believe it, yet such was the case. It was exactly 145 years ago last week that slavery was abolished in Scotland.

On entering a Scottish coalmine the worker became bound to labour there for the rest of his life, and if the mine or the ground above it was sold the right to the services of the miners passed to the buyer with the property.

### Short Way with Tramps

The sons of these miners could not follow any other occupation than mining, and could work only in the mine in which their fathers worked. There they were compelled to remain for the rest of their lives.

Tramps and vagabonds with no visible means of subsistence were sent to the mines to work there for life, and the men thus confined had iron collars riveted round their necks with the name of the colliery owner to whom they belonged. This was to prevent escape, and large rewards were offered for recapture.

For a long time past serfdom had been abolished in Britain for all other classes of workers save colliers and salt miners, but these men were slaves right down to the close of the 18th century.

### Freedom at Last

It was only on May 23, 1775, that an Act of Parliament was passed abolishing slavery for the Scottish miner, and the word slavery was used in the Act, which began thus.

"Whereas many colliers, coal-bearers, and salters in Scotland are in a state of slavery or bondage, bound to the collieries and salt-works where they work for life, and are sold with the mines, be it enacted that . . . . ."

Among the provisions it was distinctly stated that "All persons under a given age, now employed in them, is to be free after a given day."

It seems very difficult to believe that the grandfathers of living people may have been actual legal slaves in Britain and described as such in an Act of Parliament which set them free.

Truly things have changed! The grandchildren of the slaves have become, we may say, the masters of the mines.



## AUSTRALIA'S NEW WORD

WILL IT BE PUT IN THE CONSTITUTION?

A Continent Under-Peopled and Over-Governed

FOURTEEN HOUSES OF PARLIAMENT

By an Australian Correspondent

Australia is thinking hard about unification. The word sounds mysterious enough, but its meaning is quite simple. Put in plain English, it means one parliament and one government for one people in place of seven parliaments and seven governments for one people. Australia has two crying needs—more people and fewer parliaments.

At present the six million Australians, most of whom live scattered along the rich belt of country fringing the immense coast of their empty continent, are the most over-governed people in the world; there has never been anything so ridiculous in history. What is the explanation? How does it happen that a nation of sensible people tolerates such a millstone round its neck?

### Too Many Voices

The explanation is easy. Before 1900 Australia was made up of colonies with separate governments. Each government could only speak for the colony it governed. Out there in the wastes of the Pacific you would hear many voices. Some of them spoke for New South Wales, some for Victoria, some for South and Western Australia, some for Queensland; but none spoke for Australia.

Gradually wise men began to spell out the riddle of nationhood. National conventions were held, and at length the five great States on the mainland and the little island State of Tasmania agreed, in the noble words of the Australian Constitution Act, "humbly relying on the blessing of Almighty God" to unite in "one indissoluble Federal Commonwealth under the Crown of the United Kingdom of Great Britain and Ireland." So in 1900 Australia became a Nation.

### The Great Waste

The Union was framed on the model of America. It was a Federal Constitution. Big national powers, such as defence, trade, and customs, were handed to the new Parliament, but the State Parliaments were still left with all the powers not expressly taken from them.

Millions of pounds are spent every year to meet the expenses of a Federal Parliament, twelve State Houses of Parliament—each of the six States has an Upper and a Lower Chamber—seven governors and lots of aides-de-camps, seven Government Houses, all with huge staffs of servants, and so on.

It is as if the population of London were under 14 Houses of Parliament. In 1910 the Labour Party said that it was time all this waste was stopped, and the money spent in helping to build up an Australian Navy and Army and trans-continental railways, and a great system of white immigration, and other things that could justify their existence.

A great many other Australians agreed, and the opposition to the change is gradually disappearing, the vote against it being smaller every time.

### Learning the Lesson

Australians learned the lesson of unification during the war. They saw the National Government handling hundreds of thousands of Anzacs, and selling the Australian wool-clips and wheat crops to clothe and feed the Allied Armies. They saw one central Government speaking for Australia, negotiating loans with the Bank of England, backed by the credit of the continent, and they said, "If one Government can do all these things for us, what are we doing with six others?"

And so Australia is thinking hard, and before long she will write a new word into her Constitution—Unification. J. H.

## Will Flowers Drive Motor-Cars?

POWER FROM THE BLOSSOM OF A TREE

Plant Which May Help to Turn the Wheels in the Streets of Our Towns

LITTLE FLOWER THAT FEEDS MILLIONS OF PEOPLE IN CENTRAL INDIA

The greatest problem the world has is the problem of cheap power. Coal will become exhausted as the ages roll away; oil is being used up so fast that America will exhaust all her oil resources in 18 years. What is to be done then?

The answer is that we shall probably grow our power when that time comes, or long before. We shall probably use alcohol instead of oil or coal; we shall use alcohol, that is to say, for building up the world instead of pulling it down.

Alcohol has this advantage over petrol, that it can be obtained from plants, so that we can always assure fresh supplies by planting and cultivation; and it is actually well within the range of possibility that our transport will in time depend upon—wild flowers!

### Bassia Lattifolia

At any rate, it is said that one of the most promising sources of alcohol is the flower of the mahua, or mowha, tree, the *Bassia lattifolia*, as the botanists call it.

This tree flourishes in the Central Provinces of India, and the officials of the Nizam of Hyderabad declare that growing quite wild and uncultivated in that State, there are now sufficient mahua trees to yield a yearly supply of 700,000 gallons of proof spirit.

The flowers are collected as they fall, and have the appearance of dried raisins. They can be stored without fear of their spirit being diminished; indeed, it improves with a little keeping. The flowers are made into a mash by mixing them with water, and the mash is then pumped into stills and distilled in the ordinary way. The sun-dried flowers contain on an average 60 per cent. of fermentable sugar, and can be collected and delivered to the factory at a cost of 30s. a ton, one ton of flowers yielding about 90 gallons of alcohol.

### Experiments

The Hyderabad authorities estimate that the spirit could be sold at three-quarters of a rupee per gallon, which at the present rate of exchange means about one and sixpence.

Tests have been made with this new spirit, both on a stationary engine and a motor-car. On the stationary engine just over 37 per cent. more alcohol than petrol was needed; in the road tests just over 35 per cent. more alcohol than petrol was needed to the mile.

These figures, however, are not so unfavourable as would appear, because the alcohol spirit had to be tested on engines constructed for the use of petrol, and on engines made to secure the best use of the alcoholic spirit, the advantage of alcohol would be much greater. That we have not heard oftener of the

great value of the mahua tree is strange, for its story is important and romantic. The tree grows on dry, stony ground. In February the leaves fall, and the falling of the flowers follows in March and April, through several weeks. It is the corolla only that falls. A sweet, heavy smell pervades the air during this period, and the succulent flower-substance is sought for by man and beast.

### People Who Live on Flowers

Every part of the tree is of value, and some parts have quite an unusual importance. Thus, the fallen flowers form a large part of the food supply of millions of people in some parts of Central India.

The fall begins before sunrise each day, and continues until about ten o'clock. The harvest is gathered in baskets by the owners or renters of the trees, and, after being spread out to dry in the sun, can be kept for a long period, and is a palatable and sustaining food, whether eaten raw or cooked.

A calculation has been made that the capitalised value of the mahua tree flower crop in the Central Provinces of India is seven or eight millions sterling. One good tree will yield enough flowers to feed six people for four months.

Not only are the flowers used for human food, but they make excellent food for cattle. Cows fed on mahua bloom give rich and plentiful milk. Wild animals, such as the bear, jackal, and pig, eat the fallen provender eagerly.

### A Flower of Many Uses

A distillation for drinking purposes is common, and formerly there was a good deal of exportation of the flowers to France for the imitation or adulteration of brandy, but this is now prohibited.

The mahua has many uses apart from food. By the middle of June the fruit is ripe, and is knocked from the tree by poles. The outer part is eaten, and the kernel yields a most useful oil, good for cooking, and much in request as an ointment. It is also used in the making of soap and candles.

The bark and leaves are used jointly in the production of a dark brown dye.

It might be thought that such a variety of uses would lead to the preservation of the tree, but as timber it also takes a high place, for it is strong and hard, and the temptation to cut the trees down is therefore dangerous, especially as the growth is slow. The flowering is delayed until the tree is about 15 years old, so that if the trees are cut down young their flowers, and the power that may be got from them, are lost.

We may be sure, however, that if the promise of motor power is fulfilled the mahua tree has a tremendous future.

## ARE THE THEATRES GOING TO THE DOGS?

Miss Lena Ashwell, deploring the decline in the theatre, thinks Shakespeare would not have had a dog's chance today of producing his first play and developing into our greatest poet. He would not have found a building in which to produce his masterpieces, she thinks.

In that case we may certainly regard our theatres as going to the dogs.

The cinema, Miss Ashwell thinks, lacks two essentials of human appeal—

language and colour—and many of the films are untrue to nature.

Many people will agree with Miss Ashwell. It is one of the great pities of these days that there are so few good plays and so many vulgar ones, and it is a long time since it was so difficult to take children to theatres as it is today, when most of the plays which are being acted are either full of bad language or inspired with low ideals.

## THE WEEK IN HISTORY

FAMOUS LITTLE JACOPO

Gipsies Who Might Have Robbed the World

OUR GREATEST LIVING NOVELIST

May 30. Voltaire died in Paris . . . . . 1778  
31. Tintoretto, artist, died in Venice . . . . . 1594  
June 1. Sir David Wilkie, artist, died at sea. 1841  
2. Thomas Hardy born at Rockhampton, Dorset 1840  
3. William Harvey died in London. . . . . 1657  
4. Battle of Magenta . . . . . 1859  
5. Adam Smith born at Kirkcaldy . . . . . 1723

### Tintoretto

MANY of the great painters have come down to us through the centuries with a nickname that has become their real name to us.

Tintoretto, the last, and one of the most magnificent, of the artists of Venice, is "the little dyer," because his father was an Italian "tintore," or dyer. Really his name was Jacopo Robusti; but we only think of him as Tintoretto.

He was poor as a boy, and self-taught as an artist; but he had great models to study, and he learned his art from the best. He aimed at equalling "the design of Michael Angelo and the colouring of Titian," and came very near succeeding.

Many of his pictures are vast in size. One, his "Paradise," in the Ducal Palace at Venice, is ten yards high and nearly twenty-five yards long, and it contains 100 figures. Long ago, in the days when Venice neglected its treasures, a bucket was put to catch the rain coming through this picture on the ceiling!

Tintoretto's drawing was bold and his colouring daring; but his work was unequal. It was said of it that it was "sometimes equal to Titian, and often inferior to Tintoretto." Though he was inclined to be dashing and incomplete, he was a very great painter.

### Thomas Hardy

THOMAS HARDY, the first of living English novelists, has revived the old name of Wessex for the part of England lying between Sussex and Devonshire, more particularly Dorset. In Dorset he was born, and at Dorchester he has lived nearly all his life.

Beginning as an architect, he soon gave himself up to writing. His tales are pictures of Wessex men and women, set mostly in a background of heathy moorland, dark and aged; and their tone is sombre and not hopeful.

It is as if the melancholy spirit of the Great Heath lived in his spirit. His writing is intensely real and powerful, and will be read by many generations.

In his old age he has returned to the poetry he wrote when he was young, and in "The Dynasts," the greatest epic poem of modern times, he has pictured, through a long series of scenes, the later life of Napoleon, watched over by viewless spirits of the air.

### Adam Smith

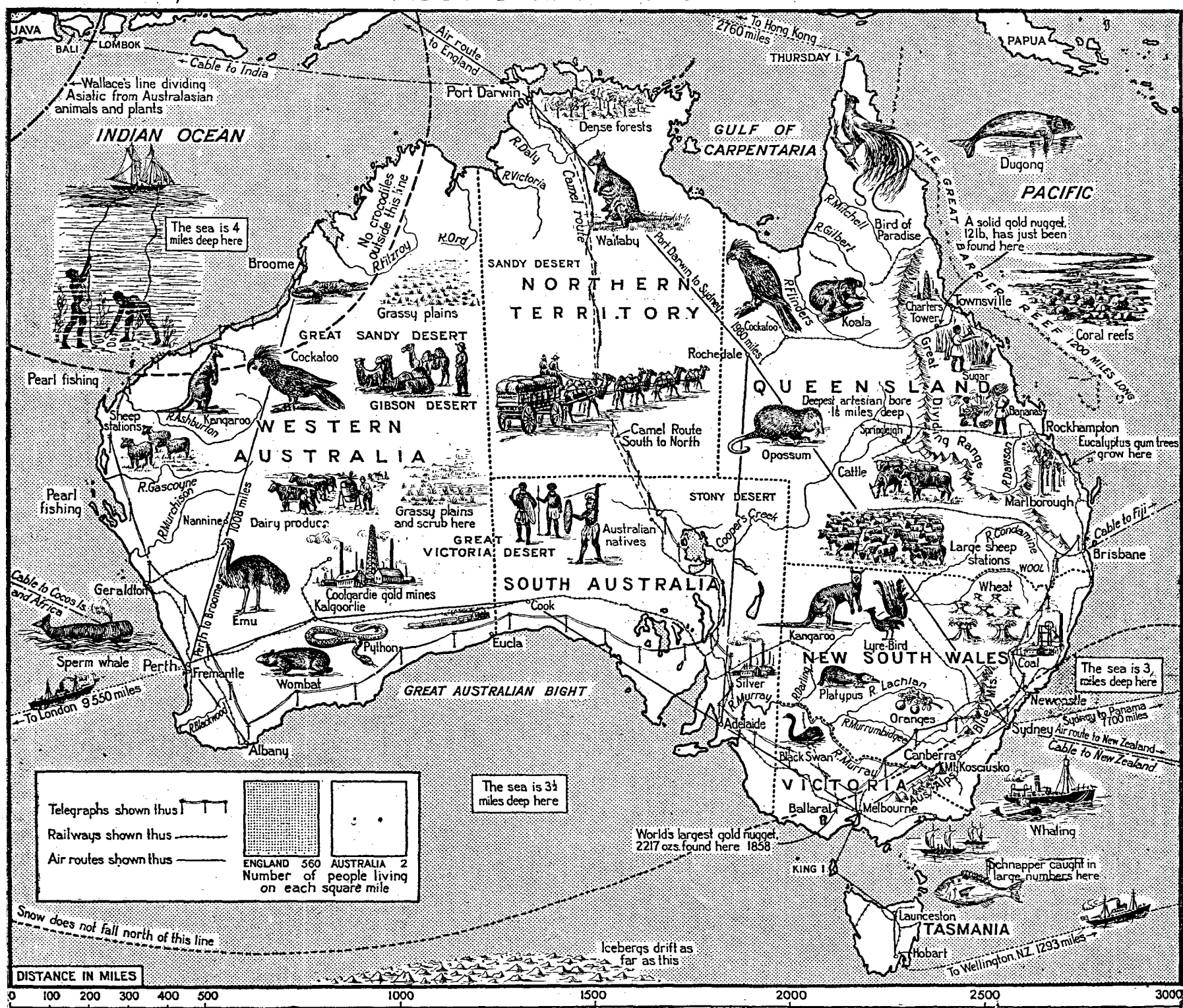
ADAM SMITH was an amiable Scottish professor, a member of the circle of literary men who made Edinburgh, in the third quarter of the eighteenth century, a real capital in the North. He also belonged to the clever London circle over which Dr. Johnson held sway as a dictator.

Except that he was stolen as a child by gipsies, but happily recaptured quickly by his relatives, he had no adventures. Had he not been recaptured the world might, perhaps, have lost one of its chief books, for afterwards he lived a quiet, reflective, and contented life among books, and out of it came from his pen one of the books of lasting value, "An Inquiry into the Nature and Causes of the Wealth of Nations."

He asked and answered the question, How do nations become wealthy? It is not a simple question. Though Adam Smith was not entirely right, his answer to a world that in his day was almost entirely wrong, was profoundly true and wise; and everything that is happening now, since the Great War, is proving its wisdom afresh.



## AUSTRALIA, THE MARVELLOUS TREASURE ISLAND OF THE SOUTHERN SEAS



## The Wonderland From Which the Anzacs Came—A Continent Under One Flag

AUSTRALIA, the largest island and smallest continent in the world, is nearly 3,000,000 square miles in extent, or 26 times the size of the United Kingdom. Yet its coastline is only 10,000 miles, while that of the United Kingdom is 8000, the reason being that Australia has a very unbroken coast, with few bays and estuaries, while the British coast is much indented.

Geologically it is one of the oldest parts of the dry land, and its people are a profound mystery to all scientists. While almost black in colour, and lower than any other race in culture, they have much more in common with the Caucasian race than with the Negroes. The race is fast dying out, and probably less than 100,000 natives exist today.

Australia is rich in every kind of natural wealth, but in many parts there is a lack of water in times of drought, though the difficulty is overcome wherever artesian wells can be bored. Some of these wells are over a mile deep. Serious droughts, however, kill off hundreds of thousands of sheep. The continent is not well supplied with rivers,

but the Murray River is 3800 miles long, and is navigable by flat-bottomed boats for a thousand miles of its course.

This great river drains and waters an area of 414,253 square miles, equal to twice the area of France and one-seventh the area of Australia. Irrigation works and wells are, of course, being extended every year.

Men of science, who have made a careful study of the subject, say that the water tapped deep down by the bore wells comes from an immense distance—from the Himalayas of India, or even from the Andes of South America. If this be so, it is very wonderful that Australia's reservoir should be 8000 miles away. The Murray River pours out in some years a million and a half cubic feet of water, or 42,000 million tons.

There are 22,181 miles of railway, costing £220,000,000, and there are 50,000 miles of telegraphs.

The total area of the continent under cultivation is nearly 23,000,000 acres, and there are 102,000,000 acres of forests, producing magnificent timber.

Here is some of Australia's produce for the year 1918:

Wheat	114,733,584 bushels	£27,199,473
Oats	10,387,431 bushels	£1,873,887
Sugar	2,879,092 tons	£4,619,893
Grapes	100,187 tons	£1,487,071
Butter	200,497,014 pounds	£13,489,062
Cheese	27,430,805 pounds	£1,020,103

The total value of the year's agricultural produce was £57,967,307, of which £5,646,619 was in poultry and eggs, and nearly £250,000 in honey and beeswax.

Australia is the world's greatest wool producer, her yield in 1918 being 573,864,083 pounds, worth £37,062,000. Here are the numbers of animals she had at the last counting:

Sheep	84,965,012	Horses	2,498,940
Cattle	11,926,024	Pigs	1,168,989

These figures will show the importance of this country as a factor in the world:

Population	5,140,542
Number of houses	1,000,000
Depositors in Savings Banks	2,889,967
Amount in Savings Banks	£121,079,838
Australia's National Debt	£700,000,000
Annual Revenue	£40,000,000

Australia is a rich mineral country. These figures show the amounts produced in 1918, and the total quantities produced from the beginning to 1918:

	1918	Total yield
Gold	£5,408,157	£594,536,723
Silver and lead	£6,104,977	£97,798,613
Copper	£4,464,787	£85,065,521
Tin	£1,432,294	£37,939,471
Coal	£6,123,747	£108,074,006
All minerals	£26,333,261	£957,862,623

The total overseas trade for 1918 was £200,291,035.

Camels are largely used for transport across the interior of the continent, but the animals are not loaded as in Asia and Africa. They pull light waggons, and eight camels can draw four tons 15 miles a day for nine days without water.

Rabbits are a great pest, and over £1,000,000 a year is spent in destroying them. As many as 25 millions have been killed in one year.

In 1788 Australia's white population was only 1030, and in 1833 only 60,000. What the vast continent needs is more and more white people to develop its marvellous resources.



## CHILDREN'S NEWSPAPER

MAY 29 1920

## The Great Game

WHAT makes Cricket the greatest of all English games? Perhaps this story may help us.

When Lord Hawke became captain of the Yorkshire Eleven he found himself in command of some of the finest players in England. He himself was only an average good player, but he was heart-set on making Yorkshire the champion county.

Now, among the giants of this famous eleven was a professional whom many regarded as the best all-round cricketer in England, with one exception. He was the county's tower of strength, and from one end of Yorkshire to the other he was a popular hero.

One day he appeared on the field after drinking too much, and Lord Hawke took him on one side. He told the hero that he had disgraced the good name of Yorkshire, and that if he did it again he would be turned out of the eleven. A few weeks after he did it again, and was turned out.

Yorkshire was staggered. It looked as if this young captain had thrown away the county's chance of the championship. Surely he had gone too far. But Lord Hawke stood firm. He said he would rather Yorkshire was beaten by the poorest county in England than that her good name should suffer in the moral judgment of the nation.

Happily for Yorkshire it stood by its captain, and Yorkshire became the glory of English cricket.

There is another aspect of Lord Hawke's captaincy which shows us why cricket is our greatest game. For years he was the only amateur in the Yorkshire team. Throughout the summer months he was travelling all round the country alone, alone in trains, alone in hotels, a solitary figure. His men adored him, and on the field he was one of them; but for the rest of the time his life was dull and lonely.

Now, he nearly always put himself in last, and, as he never bowled, his cricket was little else than fielding. Yet, because he knew his moral influence counted for so much with his men, he stuck to them, and lived this solitary life till he was too old to play. No one ever had less of the fun of cricket: no one ever understood its soul so perfectly. He has just removed from Yorkshire, carrying with him the love of that great sporting county.

Let Tommy Jones, chalking up three stumps on the wall of a backyard in London, and Johnny Smith, driving three sticks into the summer grass of a village green, think of Lord Hawke and try to play cricket as he played it, unselfishly, earnestly, for the good of his side.

Cricket is a clean game, and only the clean heart can get the finest joys out of it.



## THE EDITOR'S TABLE

Fleetway House, Farringdon Street, London  
above the hidden waters of the ancient River  
Fleet, the cradle of the Journalism of the world



## The Pity Of It

THERE were two thousand funerals in the British Isles last week that need not have been.

A thousand of them were necessary because a little germ is allowed to exist in this country poisoning the lives of people with tuberculosis. The other thousand coffins contained the bodies of children who need not have died if the nation really cared about them.

There will be two thousand more of these funerals next week, and two thousand the week after that, and on and on the long procession will reach, week after week, month after month, year after year, until the nation makes up its mind to be clean and wise, and Parliament really cares.

## Sporting Notes

At the sports in the park the high jump was won by the Grasshopper.

The Redstart did not finish the 200 yards race.

The half-mile was won by the Swift.

In the swimming match the Diver beat the Dipper.

The Bat made a good score at Cricket.

In the yacht race Small Skipper came in well ahead of the Grizzled Skipper, and the Dingy Skipper was nowhere.

## If

IF the scientist really does make it possible for us to live, nineteen centuries we may actually hope to see an end of profiteering, the settlement of Russia, and a Peace Treaty that brings peace.

## The Strange Silence

THAT is an odd idea in one of the papers the other day. Why do we never applaud pictures? We applaud an actor, or a singer, or even a politician; we applaud at the cinema as at the theatre. But we go round the matchless picture galleries of Europe and see the masterpieces of the world without a clap or any outburst of applause. Perhaps it is because we see them in ones and twos and not in crowds; but what of the dumb crowds at the Academy now?

It is all rather odd, and it brings to mind a beautiful story of an old man walking in a picture gallery one day, and coming upon a picture of the Man of Galilee.

He stood before it in a sort of reverie, half forgetting where he was, until the picture gallery and the strangers and the quiet seriousness of the place all passed from his mind, and the old man, thinking only of the picture, cried aloud, "Bless Him! I love Him!" A man near him grasped his hand, and said, "Brother, so do I!" And a third man, and a fourth man, and a fifth man came up beside them, all strangers to each other, but drawn together by the love that has conquered the world.

## Time-Table of the War

IT seems a pity that, when we are spending so much money, the Government could not find just £350 to finish the Chronology of the War which they began.

It is one of the things that are very badly wanted. The difficulty of finding war dates is amazing. Wanting one the other day, we turned to our old friend Whittaker, but for Whittaker it was a 'one-year war'—would that it had been for us all!—and if you want a date outside its particular year you must seek it elsewhere.

In very queer little compartments the minds of some men work.

## Tip-Cat

MR. BURDETT-COUTTS confesses that he only goes in a motor-car "for the purpose of getting anywhere." When he is going nowhere he walks.

THERE seems to be trouble in the Isle of Man Parliament. A deadlock in the House of Keys, we suppose.

CONCERT tickets: Playing cards.

MANY clever Scots, according to an M.P., do not come to London owing to the expense. But no Scot wants to come for nothing.

FIRE proof: Smoke.

A BATH laundry uses a gramophone to speed up its work-people. It is hoped they will break the record.

"A STABLE solution must be found for the wages question," a sort of public man says. Could such a solution be found in a mare's nest?

CAPITAL charges: London prices.

YOU cannot build an Irish Republic on a shamrock.

MR. PEMBERTON BILLING has been exceeding the speed limit. He was always over-rated.

## A Chance for Economy

THE last shot of the Great War was fired at the eleventh hour of the eleventh day of the eleventh month of the year before last, and Parliament has just been informed that the staff of the Ministry of Munitions is 5446. Making what?

## The Salvation of Us All

Produce! Produce! Were it but the pitifullest infinitesimal fraction of a product, produce it in God's name! 'Tis the utmost thou hast in thee; out with it then. Up! Up! CARLYLE

## The Lady of the Manor

By Our Country Girl in Town

IN the middle of the road a woman was picking up pieces of coal dropped from a jolting cart. Something in the spare figure, with its flowing black skirt, seemed familiar. As she put the last bit in her bag and lifted a thin, ivory-coloured face, I recognised the music mistress of other years. Then she was supposed to have come down in the world, but now—

She acknowledged my greeting with some confusion.

"I can't shake hands," she said. "You probably saw me picking up coal. My poor old mother must have a fire night and day, but the rationing makes it most difficult. However, by following coal carts I glean like Ruth!"

"You live near here now?"

"Yes; we have two basement rooms. Ah, what a difference from the Manor! You never saw my father's place, did you? The grounds were wonderful; the villagers were allowed to pick as much as they wanted in the garden and the orchard every year."

She talked of the horses and the granaries with sparkling eyes and a voice trembling with pride. The London road and the coal were forgotten.

I asked her if her mother were ill.

"Yes," she replied; "her mind is affected now. She keeps her old black purse under her pillow, and from time to time, when she takes a fancy to something extravagant, she pulls it out and gives it to me, saying, 'Take my purse, Nellie, and get me a pineapple'; or she will say, 'My dear, your gloves are wearing out; take my purse and get yourself a new pair.'"

The coal-gatherer laughed.

"She gives me her purse as if that settled everything; she doesn't know there is nothing in it."

Then, having made some polite inquiries about the health of my relatives, and delicately avoiding giving me her address, the old lady left me. She walked like an aristocrat, and carried the coal-bag as though it held visiting-cards.

What a strange pair of Londoners, this scavenging daughter and the lady of the Manor sleeping in a basement on her purse of dreams!

## Aunt Alice's Hat

By Our Country Girl

IT was on a Sunday bus, crowded with people in their best clothes carrying bunches of flowers and greasy bags of cakes to relations in Wandsworth.

In front of me stood a man holding a tiny girl by the hand. I asked her if she would let me nurse her, and as her solemn stare did not turn to a frown I was encouraged into taking her on my knee.

She gazed at me. For a moment I thought she was going to wail, and several smiling matrons seemed to think so too. But, instead, she said shrilly, "Your hat's 'zactly like Auntie Alice's what she pawned last week!"

The bus roared with laughter, and thought I had been beautifully caught.

## For Everything Give Thanks

FOR beauty in this world of ours,  
For verdant grass and lovely flowers,  
For song of bird, for hum of bees,  
For the refreshing summer breeze,  
For hill and plain, for streams and wood,  
For the great ocean's mighty flood,  
For everything give thanks.

ELLEN ISABELLE TUPPER



## THE CROSS IN THE DESERT

### A VERY BEAUTIFUL THING TO DO

#### Touching Story of an Unknown British Officer

#### A MEMORY FOR A CHURCH TO CARRY ON

A British officer, whose name is unknown, has done one of the most beautiful acts that has re-echoed to us from the war.

Away in a lonely part of Mesopotamia, in May 1918, he found, in a small Arab encampment, protruding from under some firewood, a wooden cross, and on it, on a brass plate, the name of a British officer who had died of wounds fifteen months earlier, and had been buried 370 miles away from where the cross was found. This is what his comrades had put on the cross:

In loving memory of 2nd Lieut. T. E. Brydon, R.E. Died of wounds February 1st, 1917. R.I.P.

Wood is valuable in forestless Mesopotamia, and the Arabs steal the crosses which soldiers place over the graves of their honoured comrades who have paid the full price of war. This cross had been carried far across the desert. What was the officer who found it to do with it?

He did not know 2nd Lieut. T. E. Brydon, but there is a tone in that brief memorial on the much-travelled cross that suggests he was a fine young soldier who had won the hearts of those around him.

#### Carrying the Cross

Travelling is difficult in Mesopotamia, and much baggage is a curse, but the officer carried off that cross to replace it on the grave far away. Then he found that the graves had all been robbed of their crosses, and it was useless to try to replace it, for if it were replaced it would be stolen again.

But he felt sure some tender hearts at home would be comforted if they saw the cross, and so he kept it for two years, till he came home. Then he sought out, through the Army records, the next-of-kin, an uncle of the young soldier whose memory had been loved, and returned the cross to him.

Now it is to stand in the Parish Church of Peebles; and whoever looks on it will think with kindness, let us hope, not only of the young soldier whose name it bears, but also of the modest unnamed soldier who carried the cross so far to find for it a resting-place.

## CASUALTY ROLL OF PEACE

### Worse than War for America

We are shocked by deaths in battle, because such deaths are deliberately caused, and occur in great numbers over a small extent of ground when the world is looking on. But we do not realise that, scattered thinly over the land, needless deaths from violence are occurring yearly in numbers that far exceed the deaths in the deadliest wars.

The American people have found out that, while 47,949 American soldiers were being slain in the war against Germany, 126,000 peaceful Americans were killed violently in the American Republic itself. Of these, 26,000 were children.

About 35,000 of these deaths occurred in industry, largely through the careless use of machinery. Very many of the rest are due to traffic of various kinds, and nearly all these might be prevented.

The slaughter that goes on daily through the swift speed of powerful machines that are not run with a first view to safety is only tolerated because the deaths, being scattered thinly over a wide area, are not realised as a concentrated horror.

## CAESAR'S PURPLE MADE FROM COAL

"We all know that 'purple and fine linen' are spoken of in history in reference to kings, aristocrats, or wealthy people. Nothing but the finest linen or very expensive material was dyed purple, and the cost of purple dye was the cause of this colour being used only by the very rich.

The rich purple of olden times was made by the Tyrians, and the purple of Tyre is probably still the most expensive dye in the world. The dye is obtained from a small vein in little shell-fish, looking like a periwinkle, and enormous piles of their shells have been found near the ancient cities of the Mediterranean.

The dye was re-discovered in the seventeenth century in Ireland, through

a woman using it as a marking ink for garments; and recently a dye chemist set out to find what the wonderful purple really was. After collecting 12,000 of the shell-fish, and extracting enough of the substance to enable him to make an analysis, he discovered that it was a kind of indigo, containing bromine.

The fact that any fish or animal contained the element bromine in its body was in itself a discovery, but, having determined its composition, the chemist found out how to make the dye itself, and he can now produce from coal tar the actual purple used by Roman senators. He reproduces it, moreover, at a cost of ten shillings a pound, whereas the Tyrian purple was worth a thousand pounds a pound!

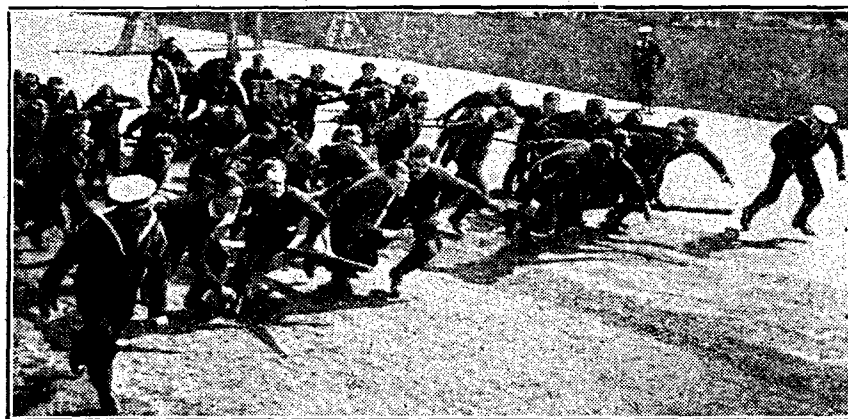
## THE THINGS THEY DO IN THE NAVY



Swinging across a chasm to fix a wire rope



Taking a gun's wheels over a 30 ft. chasm



Bluejackets start off at a run with the guns

Nothing seems too daring or too difficult for our handy men. These are some of the things they do at the Royal Tournament at Olympia in London

## NEWS FROM EVERYWHERE

The King of the Belgians paid a penny for a seat in Hyde Park the other day.

Two postal packets posted in Rheims in 1876 and 1878 have only just been delivered in Paris.

#### £400,000 in the Street

Last year London street collections for charities raised £400,000, at a cost of half a crown in the pound.

#### Cook with a Motor-car

The servant question is very critical in America. In one case a cook left her place because there was no garage provided for her Ford car.

#### Not Wanted

They do not want to keep alive the memory of the war in the Ealing schools. The Education Committee has refused to allow a German rifle to be exhibited.

It is said that over 700,000 people in Petrograd are eating herbs and grass like cattle.

A Liverpool parrot, nineteen years old, that had never laid an egg before this year, has now laid three.

#### Recording the Children

Mr. J. A. Jones, who has just retired from the post of registrar at Ealing at the age of 73, registered over 70,000 births.

#### Not Good Enough for England

Over 200 people have been ordered to leave England since January 1 this year—all aliens who were not considered desirable as citizens.

#### White Blackbird

A Staffordshire reader has seen a white-and-black blackbird, and wishes to know if other readers have seen one. They are not very uncommon.

## CARIBOU'S SEARCH FOR FOOD

### Scenes in the Barren Lands GREAT REINDEER MARCHES OF CANADA

Captain Angus Buchanan, M.C., was exploring in the Barren Lands to the north of Canada when the war broke out, and called him to sterner work. He has now been able to pick up the thread of the story of his travels, and has given us an entertaining picture of "Wild Life in Canada."

He paid much attention to the kind of reindeer called the Barren Ground Caribou. In summer the great herds travel far to the north, moving from place to place, usually in long Indian files, wearing clear-cut, narrow paths over the moss-grown surface of woodland and moor. The countless paths run in all directions, but those most deeply worn run north and south.

In autumn the snow is deep, and it requires a lot of digging to get at the white moss and marsh-grass below. Moreover, the driving wind packs the snow hard, and an icy crust forms on the surface, which it is difficult to break.

So the graceful, masterly creatures turn southwards, and their favoured winter quarters are round Reindeer Lake, which is about 140 miles long and 40 miles across at its broadest. There the snow is soft enough to let them dig with their very sharp forefeet to a depth of a yard or so, when they reach the short undergrowth. Of course, the wind sometimes helps them by sweeping away part of the covering.

#### Return from the South

Early in the year, when the severest weather is over, the does and the yearling fawns turn their heads to the north again. They travel in a leisurely way, for there is no such hurry as in autumn; they scatter and feed as they go. There is probably another reason for the leisurely return, for many of the does are with young, to which they will give birth in spring. The bucks, or males, do not follow till later.

Of the hastening southwards in autumn Captain Buchanan gives a vivid picture. "As the thermometer drops in the Far North, and food and shelter become difficult to find, the animals will band together and grow restive, and pause from time to time to sniff the wind from the south with question on their countenance. And one day, with proud heads up and anxious eyes, they will begin their long travel through sheltering forests where the snows are soft and food is plentiful beneath the yielding surface."

This is one of the mental photographs which it is a real joy to collect.

## HELPING TRAVEL

### The Splendid Atlantic Crews

The commander of the Atlantic liner New York has been talking of the effect of prohibition on his crews.

No one who has had to handle ships could want America to go back to the old order, he says; and the feature of Atlantic voyages now is the splendid way in which the crew works during the first few days out from New York, when no alcohol is allowed on board.

#### PALESTINE IN LONDON

From June 10 to July 7 there will be an exhibition entitled "Palestine in London" at the Central Hall, Westminster, where the geography, history, and daily life of the Holy Land will be pictured, filmed, and illustrated by costume lectures. Children and teachers will be specially welcomed.



## WILL NOT BE A HERO

COLONEL LAWRENCE,  
PRINCE OF ARABIA

School-days of the Man Who  
Made the Arabs a Nation

HIS FIRST ADVENTURES

By a Boy of His Old School

Many people, including most boys, would dearly like to be heroes. They would be proud to do fine deeds, and be talked about, and hear people say, "That's him!" (in spite of grammar), while they pretended not to notice that they were being noticed.

But there is one man of the present day who really declines to be treated as a hero, though he is one. Everybody who knew him when he was a boy knew he was already a hero, as far as a boy may be one, and expected him to be more of a hero when he was older.

Well, the time has come, and he is more of a hero than ever, and yet he will not own to it. He keeps quiet in the background, and lets people talk and write about him, without once allowing himself to be lionised.

### Ned Lawrence at School

This modest and retiring man is Colonel T. E. Lawrence, known when he was at school as Ned Lawrence, and now known as a soldier who had more influence in the Eastern part of the Turkish Empire during the war than any other man alive. But he says nothing about these things, and was always like that even as a boy.

Of course his school and his college are very proud of him, and one of our readers who is now at Lawrence's old school has written telling us some of the things that are kept in mind there about the hero.

At the age of eight Thomas Edward entered the Oxford High School, and stayed there 11 years, till he became a student in the University. All the Lawrence boys have been educated at the same school.

Ned, the most famous of them, was not a fine athlete; yet he was liked and admired by all, and was not a molly-coddle who shrink from bold adventure.

### Through the Dark Tunnel

Here is a proof of it. Underneath Oxford runs a subterranean stream, bricked over—the Trill Mill Stream. Well, Ned Lawrence and another boy, in a canoe, carrying lights and often lying flat to scrape through the narrow culvert, navigated the whole of that underground water passage.

Oxford is a great boating centre. Every stream that joins the Thames is explored as far up as any slender craft will float. But the river Cherwell, above Islip, is said by the guide-books to be "nowhere navigable."

To say that is to challenge boys like Ned Lawrence to prove the statement untrue. And that is what he and his canoeing companion did. They trained their canoe to Banbury, and came right down the part of the stream that was "nowhere navigable."

### Digging for History

But boyish pranks were not the chief feature of this boy's school-days. He was intensely interested in early history, and the facts about it that may be buried in the earth, under the dust-drift of centuries. So wherever any excavation was being carried on by builders there the boy prowled round, to find if he could discover something that would tell a story of the past. Nor did he search in vain, being helped by workmen whom he stimulated to watchfulness by means of his pocket-money. The Ashmolean Museum has many exhibits "presented by T. E. Lawrence," while he was yet at school.

Though Lawrence, when he entered the University, was a fine student it was not through books alone that he

Continued in the next column

## FIRST FINGER-PRINTS

SYSTEM INVENTED BY  
ENGLISHMEN

Dr. Henry Faulds and His Gift  
to the World

FAME OF A C.N. READER

In a recent number of the C.N. we wrote of finger-prints, and gave the credit largely to a Frenchman for having first thought out this scientific and unfailing method of identification.

The man referred to was Alphonse Bertillon, who began a system of identifying criminals that is used in France.

But in mentioning him in connection with finger-print records as if he were the discoverer of the method of knowing people by their finger-prints, we were both making a mistake and doing an injustice unawares; and it is the policy of the C.N. to correct its mistakes gladly, and to remedy its injustices.

### The Beginning

Our mistake was that Bertillon made his identifications chiefly by measurements of prisoners; the injustice was that the honour due for the introduction of this plan of identification by finger-prints belongs largely to an Englishman, Dr. Henry Faulds, now living at Hanley, who is a good reader of this paper.

As far back as 1858 Sir William Herschel became interested in taking the print of men's hands as a means of knowing them again; but he did not give special attention to the finger-tips, or study out a system of recording the lines on the fingers; and, though the subject interested him, he did not publish his studies. Sir William wrote an interesting letter on the subject to the editor of the C.N. just before he died.

### First Public Use of Prints

In 1880, Dr. Faulds, who then was surgeon-superintendent of a hospital at Tokio, in Japan, proposed, in our English scientific journal Nature, a method of finger-print identification, and this letter to Nature appears to be the real public origin of the method of tracing criminals by their finger-marks.

Since then Dr. Faulds has extended and perfected his plan for taking finger-prints and classifying them so that they can be readily compared. Often Bertillon measurements of parts of the body and Faulds finger-print records are now used together; but it should be known that they were separately brought into use.

Dr. Faulds, who is not at all of a jealous disposition and fully acknowledges the patient study given to the subject by Sir William Herschel, suggests that finger-print identification might be called the Faulds-Herschel system.

We are glad, now as always, to help to give honour where honour is due, and in this case it is truly deserved.

Continued from previous column

studied. He liked to see things for himself, exploring and thinking of the meaning of what he saw. And so, having to write on the Crusades for his degree, he went off to Arabia to study the homeland of the enemies of Christendom.

In this way he attracted the notice of the well-known Dr. Hogarth, the antiquarian and historian, and was sent out to conduct excavations on the site of a buried city on the banks of the Euphrates, and it was there that the war found him.

There he gained a part of the experience of the Arab tribes which enabled him to raise them in revolt against Turkey, organise them as a nation, and so overthrow the Turkish Empire from within as well as from without. But his interest is not in that; what he cares about is to tell us all what he found while digging in the desert. He will not even tell you that he is an Arab prince.

## INVENTIONS & IDEAS

Things Just Patented

By Our Patent Office Expert

These inventions have been only just patented and the Editor has no further information

### A LID THAT KEEPS ON

A lid for teapots and kettles with a hooked spindle. When the pot is tilted, the hooks catch, and the lid will not fall. This should prove very useful to housewives, who would find it convenient not to have to worry about the lid of the kettle.



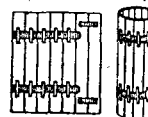
### A CURIOUS DUMB-BELL

A wooden dumb-bell of curious shape, consisting of a flat piece of tough timber with slots cut at either end so as to make the whole thing elastic for gripping.



### A COLLAPSIBLE BARREL

A barrel consisting of staves fitted with flexible hoops attached by sliding connections. The barrel can be laid out flat, when not in use, and this enables a large number to lie stacked together in a very small space.



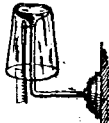
### INDIA-RUBBER ROADS

Roads consisting of vulcanised rubber slabs pegged down to wooden beams embedded in a concrete base. They should be very comfortable roads.



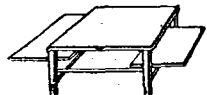
### A TOOTHBRUSH BRACKET

A bracket standing out from the wall with a clip for the toothbrush and an upright arm to hold an inverted tumbler. Such an arrangement could be fixed in places where it would not be easy, owing to lack of room, to arrange a shelf.



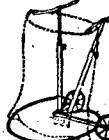
### A COMBINED TABLE AND CHAIR

A seat with a shelf on each side that can be pulled out for use and slid back between the legs when not needed. Made in cheap wood it would be a useful article for a camp.



### A SACK HOLDER

An apparatus with arms that spring apart and hold the sack open for filling or emptying. The arms can be lengthened or shortened, according to need, and wheels at the base enable the apparatus and sack to be moved easily from place to place.



### A FORK CLEANER

A framework upon which strips of material can be stretched, and the fork is then rubbed up and down with the prongs between the strips.



### AN EASILY-DRAWN CORK

A cork with an eyelet through which a cord can be passed to facilitate drawing from a bottle. The eyelet is the end of a spiral wire embedded in the cork, the bends in the wire acting like a screw and preventing the wire from coming out of the cork.



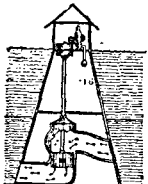
### AN EFFICIENT HAIRPIN

This has two long and two short legs, and these hold the hair securely, and prevent the pin slipping easily from the head of the wearer.



### FOR USING THE TIDES

A turbine worked by the rise and fall of the tides. It can be used for pumping water or generating electricity. The sea is admitted on one side and falls to a lower level, where it escapes, after having turned a turbine-wheel. The subject of using the tides for motive power has been much discussed lately, owing to the shortage of coal.



## CONQUERING DISEASE

TRIUMPH OF KNOWLEDGE  
OVER PAIN

Plagues that are Disappearing  
From the Earth

TYPHOID GOING NOW

We are not half thankful enough for the blessings that come to us from human knowledge and save us from sufferings that tortured our forefathers, and still torture people in lands where modern knowledge has not arrived.

During this year millions of people have died, or have suffered, or are suffering, in Central and Eastern Europe, from terrible diseases that have been conquered in Great Britain.

Typhus fever has swept over the Balkan States, Galicia, Poland, and, worst of all, Russia—a loathsome and deadly disease, grown in dirt. Typhoid has raged throughout the same region. Not long ago it was a fearful scourge to the United States and Canada.

### The Bad Old Days

A generation or two ago these and other dangerous diseases were common in the British Islands. Smallpox scarred the faces of hundreds of thousands who had escaped with their lives. Diphtheria was so deadly that doctors trembled for the life of anyone who had a severe attack, and some of the bravest of them died to give relief to suffocating patients by sucking the poison from their throats.

Typhoid caused one of the highest death-rates in the New World, both in the United States and Canada.

Now, though all these deadly diseases rage in backward countries, where doctors are few and modern science is not sufficiently understood, they have practically disappeared from our midst, or, if they reappear, they are swiftly repressed by the use of preventives and remedies discovered by research.

Smallpox has been checkmated by vaccination; diphtheria, found out in time, is but little more dangerous than a sore throat; typhus has all but disappeared; and typhoid, the germs of which were not discovered till 1880, and some kinds of which have only been mastered during the war, can be confidently met by inoculation.

### Danger of Ignorance

Indeed, the conquest of these violent forms of disease, until lately so fatal, is one of the wonders of the modern age.

Take one illustration of the prevention of typhoid. It broke out in a French garrison of 2053 men. All the men lived in the same surroundings, ate the same food and drank the same beverages. Protective inoculation was received by 1366 of the men; it was not received by 687. Among the 687 men 155 took the disease and 22 died; among the 1366 men not one took it.

Unfortunately, while mankind has such great cause for thankfulness that some of the most dangerous diseases have been mastered, there are still good people who will not look at the facts, but in obstinate ignorance, or out of a mistaken idea of kindness and humanity, will resist and attack the very means by which mankind is being guarded against terrible suffering and danger.

1,000,000

Attempts to realise the immensity of a million have led to many ingenious suggestions, among them the counting of all the blooms on the trees in Chestnut Avenue at Bushey Park on Chestnut Sunday. Such a number would be a million, it is said.

Another way of grasping the ponderous figure is to recall that not a million days have elapsed since Jesus Christ was born, and not a million hours since the battle of Trafalgar.



## THE WEEK IN NATURE

### Robin's Second Family

### DRAGON-FLIES FLASH IN THE SUN

'Tis like the birthday of the world,  
When earth was born in bloom;  
The light is made of many dyes,  
The air is all perfume.

There's crimson buds, and white and blue;

The very rainbow showers  
Have turned to blossom where they fell,

And sown the earth with flowers.

THOMAS HOOD

## NATURE CALENDAR NEXT WEEK

**May 30.** Young broods of linnets fledged  
Swallow-tail butterfly appears

**31.** Four-spotted dragon-fly is seen

**June 1.** Small garden chaffer appears

**2.** The common blue butterfly is seen

**3.** The spotted fly-catcher lays its eggs

**4.** The redbreast lays for the second time

**5.** Nightingale's song ceases

Large brown dragon-fly appears



The moon in the middle of next week

## Time-table of Sun, Moon, and Sea

	Sunday	Wednesday	Friday
Sunrise ..	4.53 a.m.	4.50 a.m.	4.49 a.m.
Sunset ..	9.3 p.m.	9.6 p.m.	9.8 p.m.
Moonrise ..	7.0 p.m.	9.44 p.m.	11.2 p.m.
Moonset ..	4.8 a.m.	6.18 a.m.	8.13 a.m.
High Tide ..	1.34 p.m.	3.28 p.m.	4.35 p.m.

Tide is for London; black figures mean next day.

## NEXT WEEK IN THE GARDEN

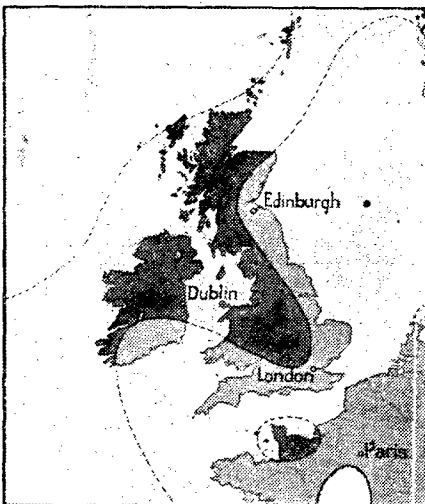
Plant out tomatoes; they should be protected at night for some time after planting out. Make weekly sowings of mustard and cress.

Train and nail the shoots of wall trees as required. Thin apricots, peaches, and nectarines; syringe the trees frequently early in the morning if the nights are cold, but otherwise about four in the afternoon. Apply sulphur for mildew, and pick off all curled and blistered leaves. See that the soil is sufficiently moist for the roots, and remove suckers.

Various kinds of herbaceous plants which were propagated from cuttings put in during the autumn should now be transferred to the open.

## C.N. WEATHER MAPS OF THE U.K.

The Cloudiest Areas in May



Certain areas are more cloudy than others, and on this map the degree of cloudiness is shown by the colour of the tint, the darkest zones being those which are cloudiest.

## MOTOR-SHIP

## AFTER THE EELS CLEARING UP A NATURAL MYSTERY

### Expedition to the Sargasso Sea LEPTOCEPHALUS AND HIS WAYS

From a Laboratory Correspondent

A week or two ago we had a visit at Plymouth from the Danish motor-ship Dana on her way to the deep Atlantic, where, under the direction of Dr. Johannes Schmidt, some very important investigations of a great natural mystery are to be carried out.

One of the objects of this expedition is to clear up the mystery of the common eel, on which Dr. Schmidt and many other biologists have worked for years.

The common eels are found all over Europe in rivers and ponds, and have been used for food for centuries; but the extraordinary thing is that, though they are so common, nothing whatever has been known about their life until the last few years, and even yet their full history has not been traced.

### The Rush to the Sea

Of course, the fact of their migration was well known. We knew of the spring migration, when millions of thread-like transparent eels, called "elvers," appear in the estuaries, and go up the rivers in shoals; and we knew of the autumn or winter migration, when the large "silver eels" go rushing down to the sea. But beyond these things we knew very little about the ways of the eel.

Many years ago some transparent leaf-like fishes were found in the Straits of Messina, brought up by powerful whirlpools from deep water. They were thought to be a new kind of fish, and were called *Leptocephalus*, and not until 25 years ago was it proved that these curious little creatures were the larvae of the fresh-water eel.

But still some people could not understand why they should be found only in the Mediterranean, and many attempts were made to find them in other places. At last, in 1904, two were caught in open sea, one off the Faroe Islands and one west of Ireland.

This clue was followed up, and part of the mystery solved. We know now that the *Leptocephalus* are only found swimming over great depths of at least 500 fathoms, and that they remain here without feeding for about a year, while they go through several changes.

### Millions Moving On

Their teeth drop out, for instance, their eyes get smaller, and their bodies grow gradually narrower and shorter until they finally reach the elver stage. They then feel the need for fresh water, and swim rapidly towards the nearest land, and on and on up the rivers, in incredible numbers, millions at a time, in a steady run lasting often for days. They are so small that it takes 1500 elvers to weigh a pound, and so plentiful that one man can catch 300 pounds in a night.

When the elvers get as far up-stream as they can go, they settle down on the bottom in the mud and begin to feed and grow, gradually getting dark in colour; and here they remain until nearly full-grown, when they return to the sea to spawn.

Because the larvae are taken in numbers only over the great depths it is now surmised that the big eels go out to the middle of the Atlantic to lay their eggs, that the eggs are laid near the bottom, and that the young rise to the surface as they develop. It is to try to find the still unknown early stages that Dr. Schmidt has now gone off to fish in the Sargasso Sea.

E. W. S.

### ROBIN'S COURAGE

An Irish reader gives this proof of the audacity of the robin: "Standing in my garden I perceived a fluttering of wings before my eyes, and then a little peck. A robin had had the audacity to carry off a fly from my spectacles!"

## C.N. QUESTION BOX

### Little Puzzles in Natural History

Answered by our Natural Historian

Here our Natural Historian, Mr. Ernest Bram, will be glad to give brief answers to questions concerning natural history. All questions must be asked on postcards, and not more than one on each card.

### How Far Does a Worm Crawl?

Generally not more than a few feet out and home; more commonly it keeps its tail in its burrow, and at the least alarm withdraws bodily into safety.

But worms do travel, colonising in all favourable soil, and it is known that in a few centuries worms can people an entire continent.

### Do Bats Fly Only by Night?

Bats fly in the evening long before darkness comes. Watching by midge-haunted stream or pond in the early twilight, it is often difficult to distinguish between bats and martins, as both hawk over the waters.

### How Far Can a Bird See?

The bird's eye combines telescopic and microscopic properties. A kestrel flying 200 feet high drops unerringly on a mouse or a beetle in the grass.

A vulture several thousand feet up descends like a bolt on carrion. Whether the vulture itself first sights the food, or watches the descent of birds flying lower down, is a disputed point. Bird vision is extremely powerful, for some migrate at an altitude of five miles.

### How Long Does a Crocodile Live?

Crocodiles kept in pools and treated as sacred in India are said to be over 200 years old. There is no positive evidence, but it is believed that these tough reptiles can live for quite 300 years, and continue slowly growing in bulk, if not in length, all the time.

### What Makes the Bee's Sting Harmful?

The sting is a tube connected with a sac containing formic acid and other irritants. As the sting is thrust into our flesh, the poison is squeezed down the tube into the wound, causing painful inflammation and swelling. Frequently the case is worsened by the sting itself being left in the wound.

### Does a Fly Do Any Good?

In wild surroundings a fly is of service, for its larvae devour bodies of dead animals and garbage; but the natural food of flies is that which breeds disease in human surroundings, and if it were immediately destroyed by human agency flies could not multiply upon it.

A really healthy society would exterminate flies because there would be no filth for them to breed in.

### How Does a Grasshopper Make His Music?

A thin, horny membrane is stretched at the rear of one wing-case, and against the extremity of this case the insect rubs the finely-notched under-edge of the other wing-case, so causing the chirping sound. The grasshopper was the first fiddler—Nature's own.

### Do Animals Know What Weather Is Coming?

Many animals are sensitive to atmospheric conditions which precede changes of weather. Birds fly inland from the sea, warned by air-currents which foretell a tempest; acute hearing enables other creatures to detect the advance of a thunderstorm before we hear it.

Dampness, which makes dried seaweed limp and a weather prophet at a country cottage door, is a signal to animals. Snails, which go to sleep in drought, have been known to return to activity two days before the coming of rain.

### Does a Leaf Drink?

No. The purpose of the leaf is to catch sunlight. The sunlight so caught by the leaf unites with water already in the plant to form sugar for the promotion of the plant's growth.

Leaves of plants grown in desert or arid soils, such as the cactus, although they do not drink, become water-storers, to prevent the parent organism from withering in heat or drought. But much water is derived from the root.

## THREE PLANETS ON VIEW

### MARS NOW RECEDING FROM THE EARTH

### The Immensity of Space

### DOUBLE STARS REVEALED BY THE SPECTROSCOPE

By Our Astronomical Correspondent

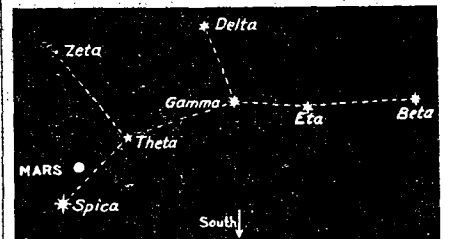
The long bright evenings, now artificially lengthened by Summer Time, prevent research among the fainter objects of the heavens for the present, but the doings of the three glorious planets Mars, Jupiter, and Saturn, are visible soon after sunset.

It can be seen that Mars, due south, has accomplished his journey towards the star Spica, to which attention was drawn two months ago; he is now about four times the apparent width of the moon to the north. On Wednesday next he will appear stationary in the sky, although actually receding from us. Soon we shall see him getting still closer to Spica, and afterwards travelling rapidly farther and farther to the east of the star.

Spica, this beautiful and colossal sun, is really composed of two bodies, together 5800 times as bright as our own sun; we dealt with him here in July last year.

### Close Together, Yet Far Apart

It is interesting to reflect that, although Mars and Spica appear to be so close, the distance separating them is almost beyond conception. Though Mars is now about 65 million miles from us, it takes but six minutes for his light to reach us, whereas light takes about 326 years to come from Spica; so that by reckoning up the number of times six minutes will go into 326 years, you may





# THE UNKNOWN TRAIL

## A Tale of Terror and Adventure in the Sunless Depths of the Amazon Forest

Told by  
Edward Wright

### CHAPTER 41

#### In the Enemy's Camp

TED heard Joy crying behind him. So did the Quichuan guide. Both of them tore towards the stricken girl.

"The red snake has bitten me!" said Joy. "Oh! My brother! My brother! I shall die! I wished to follow you. I did not look. I shall die! I shall die!"

"She has run too fast," said the Quichuan. "The poison is in her blood. It is too late to save her with the knife. But there is a tree with a yellow flower."

Back in his girdle he thrust the hunting knife with which he had meant to cut out the flesh round the wound.

Happily, he was one of Manco's best men, being a high councillor in ordinary times. He possessed strange lore of healing plants, having been taught all his master knew. Climbing in frenzied search among the trees he found the liana with yellow flowers, collected a large pressed handful of them, and fed Joy with the blossoms as quickly as she could take them.

"Eat, Queen, eat!" he cried. "Eat as fast as you can!"

The flowers had a stupefying effect. The girl became unconscious, but the anxious Quichuan felt her heart was still beating. He carried her out into the open ground, there stretched her out, and beat her arms and legs with twigs to keep the blood circulating.

She revived with a bad headache, but Ted and the Quichuan took her up, and made her walk.

Joy cried and stormed in much the same way as Ted had done in Ollantay's first camp, when forced by violent exertion to work the poison out of his body. After the saving exercise, the girl queen was allowed to rest. She fell asleep. Ted watched over her while the Indian collected food, and there was a pleasant meal for her when she awoke.

"We must take you back, royal lady," said the Quichuan. "Manco would never forgive me."

"You must go back, little sister," said Ted. "Your life is more precious than you think."

Joy paid no attention to her young companion. Her eyes were fixed on the Inca councillor.

"Would you rather your queen perished, and the Inca people were saved?" she asked. "Or would you save your queen, and let the people go down to destruction?"

"I would save the people," replied the councillor.

"Then obey me," said Joy. "My uncle is wise and old, but he can discover no way to check Ollantay. I am young and know little, but Ollantay will listen to me. Only I must reach the mountains in disguise. Lead your queen, man of the true blood!"

The councillor stood in silent thought, then he kissed the feet of the girl queen, saying:

"I will obey. The daughter of the Sun shall rule in her own right."

Ted had the good sense to say nothing. He did not know what Joy intended to do, yet he asked her no questions. Their guide led them along forest tracks for some days. Then he came out into cultivated land that climbed up a long slope to grass-grown wastes of rock.

The rock grew bare and steep, and along a narrow mountain path the adventurers followed a train of laden llamas into a cold, windy town of stone buildings, humming with machinery. Wires ran across the streets carrying the electric currents from the mountain torrents into the factories.

"I can do no more," said the councillor to the queen. "I must not

be seen, for I should be recognised. What message shall I take to Inca Manco?"

"Bid him, in my name, prepare an attack on the city with all speed," said Joy. "Command him to attack, even with spearmen alone. I will find a way of knowing when he is about to begin."

The councillor departed, and the boy and girl wandered about the mountain fortress. Nobody took any notice of them except some children, who asked Joy to play with them. Joy started a merry game, and Ted rested in the shadow of a concrete wall, pretending to be very tired. Joy obtained food for him and thick robes, and also found lodging in the house of a humble working woman.

### CHAPTER 42

#### Ted's Amazing Scheme

"Do they know who you are?" whispered Ted, as they sat together in the cave room.

"No," said Joy. "They think we are children from one of the villages of the Golden River. Thousands of them are coming to the mountains. We must get work to do."

The next morning Ted asked the working woman what they could do to get food. She sent them to her husband, and he, by happy chance, was busy in an explosive factory. He carried the deadly stuff from the store to a platform, where a wire rope railway ran down to a shell-filling works. Ted and Joy were appointed juvenile cleaners.

They had to see that the floor was dustless, and use wet mops to prevent grit being brought by the porters into the store. Carefully and quickly they laboured, and the workmen told them when they returned in the evening that the foreman was pleased with them.

"You two little ones," he said, "are better than many of the clumsy villagers from the forest. I have an order to give you full rations. You can work with me until the war is over, and Ollantay is crowned at Cuzco."

A fortnight passed, with Ted and Joy improving their position in the mountain fortress. Clad in the regulation red dress of munition workers, the lad and girl were able to roam about the new city in their leisure hours.

Ted spent some time making some simple clockwork, but he managed to explore all the city. His practised eyes, accustomed to gun positions at Felixstowe and Harwich, discerned the artillery pits round the high fortress.

Joy talked to gunners and other soldiers, and in one of her walks met a young Inca commander whom she knew. He did not recognise the queen, for Joy had stained her face a deep copper-brown, and, instead of speaking the pure

### Ici on Parle Français

#### SEEK AND YE SHALL FIND

This is from the Sermon on the Mount, in Matthew, chapter seven.

7. Demandez, et l'on vous donnera; cherchez et vous trouverez; frappez, et l'on vous ouvrira.

8. Car quiconque demande reçoit, celui qui cherche trouve, et l'on ouvre à celui qui frappe.

9. Lequel de vous donnera une pierre à son fils, s'il lui demande du pain?

10. Ou, s'il demande un poisson, lui donnera-t-il un serpent?

11. Si donc, méchants comme vous l'êtes, vous savez donner de bonnes choses à vos enfants, à combien plus forte raison votre Père qui est dans les cieux donnera-t-il de bonnes choses à ceux qui les lui demandent.

language of the court, she used as many common expressions as she could pick up.

Talking like an ignorant mountain girl, she begged the young Inca lord to tell her when the queen would come.

"The queen will come, child, when we go out to battle."

Joy clapped her hands with pretended delight, and asked when the battle would begin.

"Tomorrow," said the young lord. "Manco will attack us in the morning, and then we shall descend and bring back the queen, and march on Cuzco."

Joy skipped away from him and told Ted all that she had learnt.

"No sleep for us tonight," said Ted. "I have found the other place where the explosives are stored. I can get work there this afternoon. Meet me when the sun goes down, and I will tell you my plan."

Ted was once more the leader. Joy had hoped to find some young noblemen inclined to her cause, and she had given way to despair on discovering that nobody of any importance in the mountains was discontented with Ollantay.

Her attempts to provoke expressions of disgust with the Tupi commander, by hinting that she thought him unfit for his position, had brought her twice within danger of being whipped.

More and more she became afraid that, if she attempted to create a rising by proclaiming herself to be the queen, she would only be locked up and handed over to the Tupi chief.

"Tell me, what is your plan, brother?" she said when Ted met her in the evening by a rock outside the city where the two used always to come to talk freely. "I can do nothing. No one will listen to me."

"My scheme is simple and terrible," said the English boy. "I can blow up this fortress. My father taught me how to fire explosives, and ever since we entered the stores I have been making timing machines, and searching for detonators. Another boy has brought me some, thinking I was going to show him how to let them off when we could get away alone."

"I have fixed two in the main depot. Can you get into the other depot tonight? I will come with you, and prepare an explosion at day-break."

### CHAPTER 43

#### Shots in the Darkness

"Of course, the place is guarded," said Joy; "but we might get in by the sleep scent."

They went together to the second store-place, and found the soldier guarding the door. Joy asked to be allowed to enter to fetch something she had left while she was working. The soldier roughly told her to go to bed. He did not care if it were a dangerous metal pin or not that Joy pretended she had dropped by a stack of nitrate explosive. He could not let anybody enter.

"Bother!" cried Joy to Ted. "We cannot enter. I shall be dismissed tomorrow morning and punished."

Ted came forward to console his sister, according to the scheme they had formed. Joy slipped down on the roadway. Ted bent over her, and the soldier, who was a kindly fellow, also leaned over the girl. It was a mistake on his part to do so. As he leaned down a dizzy feeling came over him. His knees gave way. He fell on Joy and did not move.

The girl queen dragged herself from underneath him, and then helped Ted to pull the senseless body into the shadow of the doorway.

"I could not have held my breath a moment longer," whispered Ted. "You still smell of that horrible stuff."

"I feel a little funny myself," said Joy. "Now, quick to work!" The girl queen was, like her uncle, expert in the use of strange plants. To her had been revealed the great secrets of the leech-craft

of the Incas. In wandering with Ted about the mountains she had observed a dull, small scrub which she knew as the sleep-plant.

By holding her breath while rubbing the leaves she could produce a strong, thick scent that stupefied anybody who breathed it. This discovery of hers had been the base of Ted's plan.

In spite of their modern ways, the tribesmen of the mountains had not troubled to put locks on the doors of their buildings. They relied on the obedience of their sentries and the superstitions of the common people. Accidental explosions in the factories had for years terrified the working folk, and any of them would rather have ventured in a haunted valley by night than walk in darkness in a munition store.

Holding Ted by one hand, Joy led him through a pile of explosives. Into it the boy inserted a small detonating fuse, attached to which was a rough clockwork device of his own making. A second stack of explosives was prepared for detonation in the same manner.

"Give him a little more sleep scent, Joy," said Ted when they came out and saw the sentry had not recovered.

Joy opened her tiny box and rubbed some leaves under the man's nose. He was left by the door.

"Now," said Ted, "let us watch for the attack by Manco's troops."

Save for the sentries at all important buildings, the mountain fortress seemed deserted. The army was arrayed on the slopes with almost every man under cover. From the plain there came the crack of firearms, but only in a feeble way.

"Manco is sending out skirmishers and feeling for Ollantay's outposts," sagely remarked Ted.

Both he and Joy knew the main positions of the defence, and were careful not to approach them. Little mercy would have been given to either boy or girl had they been too venturesome. The fear of spies was upon the rebels, and they spared nobody who was not in uniform.

Strong though they were in numbers and armament, the prestige of Manco weighed heavily upon their uneasy minds. By his genius the old Inca had built the new state; could he, they wondered, destroy what he had made?

Eastward, under a sky black with rain-clouds, there opened the great battle, in the issue of which all the world might be involved. Ted and Joy were perched on a crag, their eyes fixed on the blackness of the lowland forest, seeking there for the first, dim colours of daybreak. Fiercer and fuller rang the fire of rifles and machine-guns. A big rebel gun thundered. Then heavy batteries roared together.

"Manco's men have started to move in masses!" exclaimed Ted.

"Have they?" exclaimed an angry voice. "Two young spies, by the splendour of the Sun! Kill them, my men!"

He emptied his revolver at Ted.

TO BE CONCLUDED

### Notes and Queries

**What does H.M.I.S. mean?** The letters H.M.I.S. after a man's name mean that he is one of His Majesty's inspectors of schools.

**What is a Sepoy?** A sepoy is a native Indian soldier trained and equipped in European style. The name is from the Persian sipah, meaning soldier, and is the same word as the French spahi, an Algerian cavalryman.

**What are the Truck Acts?** The Truck Acts are Acts of Parliament forbidding the payment of workers in goods instead of money.

**What is a Returning Officer?** A returning officer is the official who is in charge of the arrangements for a parliamentary election in a constituency.

### Five-Minute Story

#### In the Tiger's Cage

FRANK MILWARD had neither father nor mother. He lived with his aunt, a poor widow, and did his best to help her by doing odd jobs for the village folks. So that when the menagerie came to the village, and the proprietor of it offered him five shillings a week and his keep, he gladly accepted it.

"You'll help to put the tents up when we reach the villages, bring straw and fodder for the animals, and mind boys don't crawl under the canvas to get out of paying," he was told.

Frank took a great interest in the animals, and never tired of watching them.

"Now then lions," said the trainer to him one day, "are as gentle as a couple o' sheep. A baby might go in along o' them and never be none the worse. But that there tiger"—he pointed to where Old Stripes, as he called him, paced restlessly backwards and forwards—"I wouldn't go in his cage for all the jewels o' the Sultan of Turkey!"

Frank determined to give Old Stripes as wide a berth as was consistent with the carrying out of the duties assigned to him.

Things went very well for a week or two, and beyond having his hair pulled occasionally by the monkeys, and being knocked over one day by an extra vigorous pat from the elephant's trunk, nothing much happened.

They had reached the village of Cowfield, in Sussex, when something did happen.

The weather was very bad when they arrived, and a large barn was hired from a farmer to give protection to the animals from the rain. The cages were wheeled inside, and the animals made as comfortable as possible.

The living tents were pitched some distance away from the barn, so that when Frank was told off after supper to see the animals were all safe, he did not regard the prospect before him as a particularly pleasing one.

He had scarcely entered and closed the barn door behind him, when he saw by the light of the lantern he held that the tiger's cage was empty!

Startled by the discovery, he wheeled round. Crouching in a corner, in the very act of springing upon him, he saw—Old Stripes! Its lips were drawn back, showing the long, cruel teeth, a red, murderous light gleamed in the narrow eyes, the muscles stood out taut, like cords upon the supple body.

The animal was in mid-air when Frank's inspiration came.

Like a flash he leapt into the tiger's cage and closed the door.

And it was there, in the cage, safe and sound, they found and rescued him an hour later.

"That was what I call presence o' mind," said the trainer, giving Frank an approving pat on the shoulder as he spoke.

"Anyhow," laughed Frank, "I shall be able to say that I've been in Old Stripes's cage."



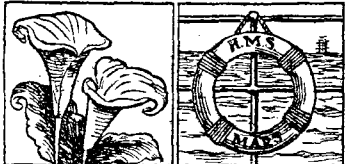
## Oh, What a Life This Is!

## D! MERRYMAN

LADY: "If you only had your last place for three days, Bridget, what makes you think the lady was pleased with you?"

NEW MAID: "Because she said she was pleased when I left, ina'am."

## What Is Wrong in These Pictures?



Can you see what is wrong in these two pictures? Solutions next week

## Like a Whale

After the birth of a former prince a famous wit wrote these lines:

THE first of all the royal infant males  
Justly takes title as the Prince of Wales;  
Because 'tis clear to seaman and to lubber  
Babies and whales are both inclined to blubber.

## Do You Live in Rutland?

RUTLAND probably stands for root-land, and is a reminder of the time when this region was full of roots and stumps after the forests had been felled.

## What They Thought of What He Thought

THEY thought he thought great thoughts;  
No other thought they thought he thought.

If they thought the thoughts they thought he thought, they thought they thought great thoughts.

## A Picture Lesson in Geography



What English village does this picture represent? Solution next week

THERE was an old captain of Perth,  
Who was born on the day of his birth;

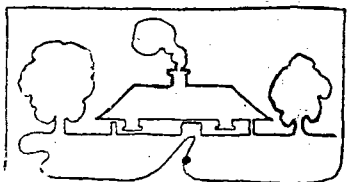
He was married, they say,  
On his wife's wedding day,  
And he died on his last day on earth.

## A Picture in One Line

HERE is a picture drawn with only one line. The artist started at the bottom left-hand corner.

Take a pencil and see if you can make a fresh picture without once lifting the pencil off the paper. You can draw anything you like, a cottage, dog, boy, boat, and so on.

For the best picture made from one line on a postcard the Editor



will give a prize of five shillings, and for any others that he may publish he will pay half-a-crown.

Post your pictures before June 8 to C.N. Picture, Gough House, Gough Square, London, E.C. 4.

## What Does This Verse Mean?

EH horn teach myrrh made nose,  
Buy seize wear awl groat ales;  
Hear chilled wrens port inn rose,  
Seek your gain steal sand wails.  
Sum son there yell oh hare,  
Sumswhim threw sigh leant baize;  
Sow form sand fay says fare  
Shy never knight sand daze.

Read it quickly, and you will see that the sounds give you this verse.

A HAUNT each mermaid knows,  
By seas where all grow tails,  
Here children sport in rows  
Secure 'gainst eels and whales.  
Some sun their yellow hair,  
Some swim through silent bays;  
So forms and faces fair  
Shine ever nights and days.

## The Cat Up the Tree

JOHNSON'S cat went up a tree,  
Which was sixty feet and three;  
Every day she climbed eleven,  
Every night she came down seven.  
Tell me, if she did not drop,  
When her paws would touch the top.

Solution next week

## A Little French Made Easy



Une épée Le bateau La flèche

Le soldat le menaça de son épée  
Le vieux bateau est échoué  
La flèche du clocher est gracieuse



La baraque Une idole Le parachute

On va démolir cette baraque  
On voit cette idole dans un temple  
L'aviateur descend en parachute

## The Famous-Lexicon

When the famous Greek lexicon compiled by Dr. Liddell and Dr. Scott was published, a boy at Westminster School, where Dr. Liddell was headmaster, wrote this verse for an examination. Dr. Liddell read the verse to the school, complimented the author, and awarded him the prize for the best composition.

TWO men wrote a lexicon, Liddell and Scott;  
One half was clever, one half was not.

Give me the answer, boys, quick, to this riddle,  
Which was by Scott and which was by Liddell?

"HAVE you a match?" asked the bore who had dropped into the busy man's office for a chat,  
"My cigar has gone out."

"It seems to have the advantage of you," remarked the busy man.

"How's that?"  
"It knows its place."

## Is Your Name Bacon?

ALL the people called Bacon did not get the name in the same way.

Long ago, no doubt, there were people who dealt in bacon, and gradually the name of the article became attached as a surname.

In other cases the name is simply a changed spelling of beacon, and the ancestors of the present Bacons were keepers of some old beacon or lived near one.

## ANSWERS TO LAST WEEK'S PUZZLES

## Puzzle Rhyme

Three wise men of Gotham went to sea in a bowl;  
And if the bowl had been stronger, my song would have been longer.

Buried Animal Rhinoceros

## The Adventures of Jerry

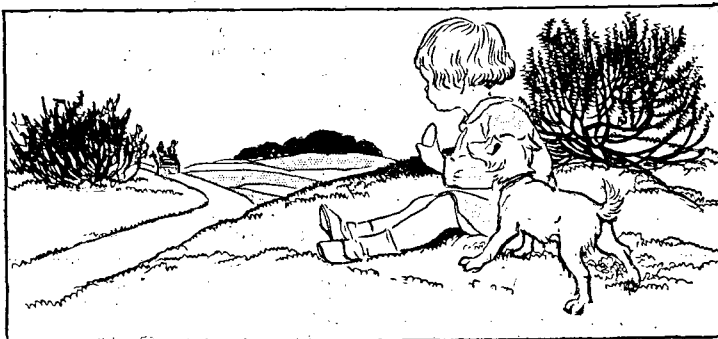
TOLD BY MARGARET LILLIE

## CHAPTER 4

Jerry hides in the barn while the farmer is looking for him, and when he has gone off down the lane Jerry darts off the other way. Not far from the farmyard gate the lane came to an end, and suddenly Jerry was on a big open common, covered with heather and golden gorse.

On and on he ran. He went quite a long way till the sound of strange voices made him stop. He stood still and listened.

They were loud, rough voices, and all at once he caught sight of a little donkey cart, with two rough-looking men in it. They were quarrelling, and beating the donkey to make it go faster.



Jerry sat down for a minute to rest

Jerry's heart began to go thump! thump! thump! Suppose they should see him, and beat him like that! He kept quite still till the cart was some way off, and the voices died away, then he crept out and started off again.

By this time he was feeling very hungry. He put his hands into his pockets, and to his great joy found a lump of chocolate and two biscuits. He was glad. He sat down for a minute to rest while he ate them.

He had gobbled up the chocolate and was just putting a biscuit into his mouth, when, to his great surprise, it was suddenly snatched out of his hand.

He cried out and looked round, and saw a little white dog.

"You did give me a shock!" he said; "and it wasn't very polite to snatch my biscuit like that. Perhaps you're hungry—here's another for you."

The dog swallowed it at a gulp. Jerry laughed, and patted him. "I haven't got any more," he said. "Run away—I expect you belong to those rough men."

But, whoever it belonged to, the dog seemed quite content with its new master. It was no good saying "Go back!" for the dog still followed him. At last Jerry gave it up.

"Well," he said, "if you will come, you must. I am having an adventure, and it will be nice to have company."

More of Jerry next week

## Jacko Takes a Short Cut

JACKO was standing cheerfully on his head in the middle of the lawn one morning when his mother called him.

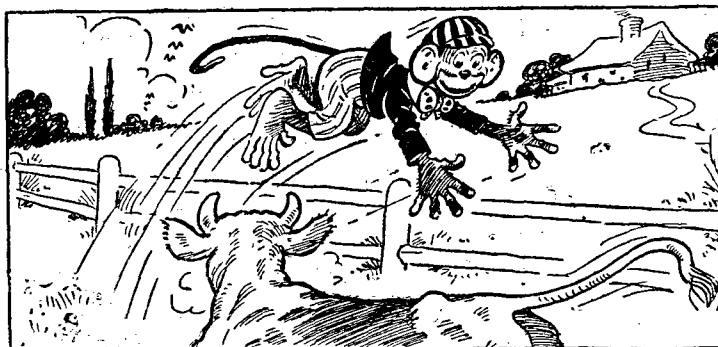
"Run over to the farm, Jacko," she said, "and fetch me some butter. You had better go round by the lane—they have got a bull in the meadow."

"I'm not afraid of that old thing," said Jacko scornfully; "he's as tame as a rabbit. Why, I'd get on his back," he declared, as he strode out of the house.

"Dare you to!" cried the butcher-boy who overheard him.

Whereupon Master Jacko dashed across the lane, sprang over the fence and into the meadow.

The bull, seeing him coming, swished his tail and turned a wary eye upon him. He didn't look too friendly, and for a second Jacko hesitated. But a glance at the grinning butcher-boy spurred him on. He took a flying leap. The bull raised his head, and met him half-way—and shot him neatly back into the lane again!



Jacko took a flying leap, and the bull met him half-way

## Who Was He?

## The Wonderful Doctor

EVEN the Dark Ages produced some great men, and one of the most remarkable was an Englishman, the son of well-to-do parents in Somersetshire.

Of his youth we know practically nothing, but he went to Oxford University, and then to Paris, where he took a doctor's degree. He was over thirty when he returned to Oxford, and became a monk.

But his brilliant genius needed a fitting outlook, and he took up the study of natural science, becoming one of the great pioneers whose names are honoured all over the civilised world today.

Of course, in those dark times science and superstition were largely mixed, and the great aim of the chemists was to discover some means of changing baser substances into gold. This became one of the quests of the Oxford monk. Later ages looked with pitying contempt on any such idea, but it would now seem as though the old alchemists were not so very wrong, after all, and that one day we may be actually able to turn lead into gold.

Much money was needed by the monk for books, and experiments, and his friends kept him supplied, so that in the course of twenty years he received about £2000, equal to perhaps £20,000 of today's values.

He was probably the most enlightened man of his day, and denounced the idleness and ignorance of many of his fellow monks. This called down their wrath, and made him many bitter enemies, who persecuted him. He was accused of conspiring with the Evil One and performing his experiments by magic. These charges were greedily believed, and the authorities stopped his teaching and sent him to prison in Paris, where he was forbidden to write.

A learned cardinal, however, being elected pope, immediately ordered the philosopher's release, and, to his everlasting honour, took the poor monk under his protection and encouraged him to publish his writings.

Unfortunately, this enlightened pope died after a few years, and the monk's enemies again triumphed over him. He was imprisoned once more, though 64 years of age, and he remained in prison for ten years. Then he regained his liberty and lived for some time longer.

Hedied at the age of eighty, and was buried at Oxford at the end of the thirteenth century.

For his age he was indeed a miracle, and was called the Wonderful Doctor. Here is his portrait. Who was he?

Last Week's Name—Robert Burns





The Children's Newspaper grows out of My Magazine, the monthly the whole world loves. My Magazine grew out of the Children's Encyclopedia, the greatest book for children in the world. The Magazine appears on the 15th of each month, and the Editor's address is: Arthur Mee, Fleetway House, Farringdon St., London, E.C. 4.

# CHILDREN'S NEWSPAPER

May 29, 1920

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Postage of the Children's Newspaper is 1d. inland, 4d. abroad. A year's postal subscription, inland, 11s.; abroad, 8s. 8d. A year's postal subscription to its monthly companion, My Magazine, is: British Isles, 10s.; Canada, 13s.; elsewhere, 15s. 6d. In South Africa, Canada, and Australasia all subscriptions must go through the agents given below.

## BOY ORGANIST · FOUR-YEAR-OLD LIFE-SAVER · RAVEN OF THE TOWER



The little life-saver—Ivan Cook of Sheffield, four years old, who saved his cousin Annie, shown here by his side, from a big bath of water, into which she had fallen.



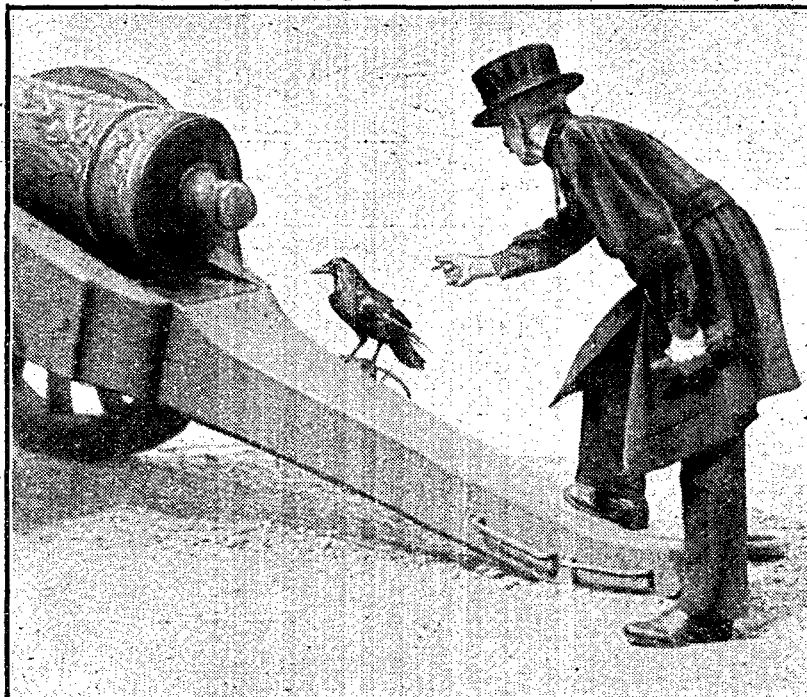
A whirlwind of happy girls—These girls, employed at a well-known London restaurant, are having their annual sports, and are seen here jumping the rope in an obstacle race. The skill of some of them shows that they have evidently been practising a great deal in readiness for the race.



Aeroplane shot from a catapult—Leonard Leavy, an American boy, who has devised a new use for the catapult. He fires his home-made aeroplanes into the air.



Church organist at 14—Noel Gash, son of a policeman, organist at St. Barnabas Church, Pleasley Hill, Nottinghamshire. See page 2.



The raven of the Tower—Ravens are now almost extinct in England, but at the Tower of London there are several tame ravens, which are great friends of the beef-eaters. The one shown here has lived at the Tower for over sixty years.



One of the children helped by the C.N. Fun! This little girl in the stricken land is able to smile as the result of British kindness.



Eighty years young—These old ladies, all over eighty, gave exhibitions of spinning at the Royal Dublin Society's show in Dublin recently.



Ypres begins again—Although its glorious buildings are a mass of ruins, Ypres is again becoming a centre of busy life once more. Here we see the cattle show recently held in the market square, with the ruined Cloth Hall in the distance. Many of the cattle were given by Great Britain.



Playing at being grown-up—At a recent fête in connection with Woolwich Arsenal these little children dressed up cleverly as a bridal party.



Reading a stupid will—The founder of an old charity at Leighton Buzzard insisted that his will should be read annually while a boy stood on his head. This is a queer example of the force of a stupid idea.



Dancer at Australia House—At the Royal Caledonia Fair, held in Australia House to assist the Dr. Elsie Inglis Fund, little Sally West, shown here as a rosebud, delighted everyone with her dancing.